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Thesis

THE PSYCHOLOGY OF THE PRE-SCHOOL CHILD  
WITH REFERENCE TO PLAY

Submitted by

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(B. S., Wisconsin University, 1919)

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THE PSYCHOLOGY OF THE PRE-SCHOOL CHILD  
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# THE PSYCHOLOGY OF THE PRE-SCHOOL CHILD

## WITH REFERENCE TO PLAY

### INTRODUCTION

#### I. THE PROBLEM

The purpose of this thesis is to attempt to place a valid valuation upon the importance of play in the life of the pre-school child through a study of his psychological development and his activities which may be considered play.

The pre-school child as referred to in this paper shall be the child from birth up to his sixth birthday; since that is the age at which he is generally admitted to primary school grade. The kindergartens which have become a part of the public schools in most urban communities tend to push the pre-school age down to five years; however kindergarten education is still only for the privileged child, for less than 13 per cent of the American children of kindergarten age are afforded such educational advantage.<sup>1</sup>

Until very recent years it was the general opinion that such care as answered the physical needs of a child was all that was necessary to provide for him until he was old enough to be cast into the mill of the public schools. Any woman who could keep a house and cook meals was supposed to be able to provide this care, and the child by virtue of some endowed wisdom was capable of choosing and directing in matters which had to do with all other phases of his development. That he would play peacefully and quietly was all that was required of him and his requests for toys and amusing

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<sup>1</sup>National Kindergarten Association, Washington, D.C.



trinkets were provided for him as far as the family purse could allow. Why, how, when or with what he should play was of little concern except to the most fastidious parent.

Thanks to the rapid strides which the science of the mind has taken in the direction of child study, the problem of child nurture is taking on form and fascination. The confused, groping parents can begin to see light through their overwhelming responsibility and the child's life is taking on order and meaning.

Educators and students of Child Psychology now know that there is a best way for a child of four years to play; that there are certain play materials for his use which will best enable him to express and discover his unfolding mental life, and so for every child, depending upon his mental age. These investigators tell us that a child of four years who plays exclusively with the same materials and in the same way as the two-year-old, indicates that his mental growth has been or is being delayed. So in schools for mentally arrested children, the twelve year old boys are taken back to the play activities of the kindergarten, and through painstaking effort the attempt is made to ever so slowly push his mental age up toward his physical age. It is believed that if he can be brought to realize the capacities of the five-year-old, the sequence will tend to follow, and he will some day be ready for the activities of the six-year-old. It is the purpose then of this thesis, through a psychological study of the pre-school child, and an analysis of his play activities, to study the developmental value of play during these years of infancy and early childhood.



## II. METHOD

In approaching the problem as stated, a study shall first be made of the original endowments of the child and their manifestations in his activities during his development. The other phases of his mental growth shall be dealt with accordingly.

A review of the definitions and theories of play shall then follow to give a general view of what has been and what are the opinions held by educators as to play, its nature and function. Then special attention shall be given to the types and elements of the play of children. This section dealing with play shall be concluded with a consideration of the physical, intellectual and social benefits to be derived from play.

Part three shall be a summary of the development of the pre-school child by age groups and the play activities best suitable as a medium for his expression and as stimulation to his awakening abilities. This shall be presented in chart form for the sake of brevity and to avoid repetition.

A general statement of the psychological and educational value of play in the genetic development of the pre-school child shall conclude this presentation of the subject under consideration.



## CHAPTER I

### THE PRE-SCHOOL CHILD--PSYCHOLOGICALLY CONSIDERED

#### I. NATURAL TENDENCIES

Human behavior can in general be divided into two types, the learned and the non-learned. At birth the activities are of the latter type and can be subdivided into three groups: the automatic organic, the reflexive, and the instinctive acts. The learned behavior which appears from time to time consists of habits and voluntary acts.

##### A. Automatic Organic

The organic processes of circulation, respiration, digestion, secretion and excretion which start at birth are constant and can be altered only very slightly by changes in the general well-being of the organism. These unlearned organic reflexes arise from internal stimuli, are rhythmical in nature and are essential to the healthful activity of the entire organism.

##### B. Reflexes

Sneezing, winking, coughing and the knee jerk, etc., which are responses to external stimuli, are also of the non-learned group. They remain practically uniform through life and are commonly called reflexes.

##### C. Instincts

The other group of non-learned behavior consists of the more complex activities such as crying, withdrawing from injury, fighting, food-getting, and so forth which, though performed without having been learned, differ in origin and variability from the former groups. These latter are generally called instincts.

There is however no sharp line between reflexes and instincts. There are such close resemblances that it is sometimes difficult to say to which group an act or process may belong. Psychologists have spent valuable



time quibbling over the distinctions. Generally it is accepted that reflexes do not involve the higher cerebral centers and that they are simple, restricted, practically uniform in their function, and follow immediately after the stimulus which is generally from without.

"In a very general way," says Dr. Waddle, "it may be said that an instinct is: (1) an inborn tendency, with its basis in the neuro-muscular system; (2) that it involves some form of activity; (3) that connected with it there is usually some emotion; and (4) that the response is essentially uniform and usually typical of all members of a species."<sup>1</sup> Beyond these general characteristics there is often disagreement; one extreme restricting instincts to only a very few responses, and the other extreme admitting an almost limitless number.

A consideration of the stimuli which arouse instincts reveals further the nature and origin of instincts. In the first place, the specific situations which arouse an instinctive response vary with the species as does also the response which a specific excitant will bring forth in different species. For examples, a mouse scurrying across the floor will bring the cat pouncing after it for her supper, while the same sight will pass unnoticed by a rabbit; yet a cabbage patch will reverse the reaction. Then again, the appearance of a dog will send the rabbit running to cover while the cat's reaction will likely be to stand her ground and fight.

It has been observed that certain qualities of indefiniteness in situations have the tendency to arouse some kind of instinctive reaction. Such characteristics are suddenness of appearance, disappearance or movement,

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<sup>1</sup>Waddle, Charles W., Ph.D.: An Introduction to Child Psychology, p. 100.  
Houghton Mifflin Company, 1918



obscurity (from any cause), strangeness, and intensity or faintness of light, color, or noises. The use made of these elements by the motion picture producers to successfully arouse in the observers the desired reaction is worthy of note.

Out of experience and accompanying ideational and sensory elements there arise what Dr. Waddle calls secondary stimuli because of their association with an instinctive response at some time called forth by a primary cause.<sup>1</sup> These are particularly characteristic of man though they are present in higher animal forms. Thus a horse shies each time he passes over a certain bridge because he once was startled by a dog at that particular point. So it is that through experience and ideation, fear of offending social convention comes finally to have an instinctive characteristic.

Another point in the consideration of aroused instinctive reactions is the overlapping and mingling of two or more conflicting responses acting at the same time, resulting in what are considered our complex emotions such as jealousy or anxiety. Thus the mother of the late home coming child experiences such a confusion of the emotions of love, fear and anger that the response is doubtful or each emotion may dominate in rapid succession, and the child's welcome is very uncertain. This illustrates the mental element in human instinctive responses and the changeability of both the stimuli exciting the instincts and the responses, all of which is basic in the matter of modifiability of instincts and habit formation.

Instincts are innate tendencies, that is, are inborn, yet the baby at birth possesses only those which are for him life preservative in nature and necessary to development and growth. Thus he cries to make known his

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<sup>1</sup> Waddle, Charles, W.: An Introduction to Child Psychology, p. 18  
Houghton Mifflin Company, 1918



need of food, his neuro-muscular mechanism sets up the appropriate food taking response of sucking, and provides him with the general tendency to activity from which develops later voluntary acts and habits. As growth continues the other instincts common to man each have their period of origin and growth when need, psycho-physiological conditions and appropriate stimuli join in causing them to arise. No instinctive response can be called into being by any one or two of these favorable conditions. For example, the nine months old baby who can just draw himself up alongside a chair can not walk out of the house no matter how great the need or stimulus may be. Yet at a year and a half, a door left open by a thoughtless attendant will bring him running forth into a rain storm.

Of importance to the student of pre-school education is the fact that some instincts are transitory and unless appropriate stimuli and opportunity for exercise is afforded at or near the time when they normally arise, they tend to wane and may disappear entirely. Thus such instinctive tendencies as sociability or playfulness may be decidedly impaired if conditions favorable for calling them into activity are not available.

Other characteristics of the instincts of human beings are that they are less definite, perfect and constant than those of any other species. With man's intelligence, it is less necessary that his activities be as definitely, perfectly and constantly controlled by his innate tendencies. In the lower animal forms some of the instincts are periodic, such as the mating, nest building, and migratory tendencies of birds. In man those tendencies arising from the sex instinct are perhaps the most rhythmic.<sup>1</sup>

The relation existing between instincts and emotions is of particular importance in the process of education, It is true that every instinctive

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<sup>1</sup>Waddle, C.W., p. 105



response is accompanied by an emotion; in some instances the emotional element is so strong that the underlying instinct is often called by the emotion accompanying it, as for instance, the "instinct of fear." It can not be said that every instinct has a corresponding characteristic emotion, for while the instinct of flight is accompanied by the emotion of fear--pugnacity by anger, and so on; when we come to the instinct of gregariousness, it is difficult to locate a characteristic emotion. Responses resulting from a complexity of aroused instinctive tendencies thus give rise to a complexity of emotions, and we have such emotions as reverence comprised of admiration, fear and gratitude.

These facts concerning the close connection between instincts and emotions help us to understand the emotions of childhood. First, since instinctive tendencies are so dominant in the early years, the accompanying emotions are proportionately strong and uncontrolled. Second, that the periods in childhood and adolescence when many instincts are arising and functioning are periods of great emotional strain. Third, from the consideration of complex emotions arising from a complexity of instinctive tendencies, it can be appreciated why little children can not experience such emotions as reverence or awe, for the instincts upon which they are dependent have not as yet become active.

There are as many classifications of instincts as there are writers with varying theories or different points of view. There appears to be as yet no wholly satisfactory grouping which accommodates all the instinctive tendencies without overlappings which give rise to the same. In any classification the division into instincts is arbitrary, and any one which suits the purposes of the discussion is legitimate. To illustrate the complexity



of instincts which may be active in a given reaction consider the activity of fighting which may be for the preservation of life against attack. It may be a struggle to defend offspring, to acquire a mate, or to obtain food. It may have its basis in sexual desires, in gregariousness or the tendency to acquire. It may, on the one hand, be in self-abasement to fulfill the order of a leader, or it may be merely a form of self-assertion. So it is with any complex reaction of instinctive origin which man may perform.

The most simple classification which can be found is that given by several modern writers in the field of Educational Psychology. Professor Gates groups the innate tendencies which he recognizes as instincts into three classes: "Instinctive responses to bodily or organic conditions, instinctive responses to objects or events in the environment, and instinctive responses to the presence and activities of other human beings."<sup>1</sup> In this classification he has listed twenty-one responses.

Norsworthy and Whitley in "Psychology of Childhood" divide the "tendencies to act as caused by original nature....into two groups, the non-social instincts....and social instincts."<sup>2</sup> These writers condense instinctive tendencies to eleven in number.

For the purpose of this discussion the latter classification shall be taken, though the listing shall not be the same as given by either writer.

The important non-social instincts or those which manifest themselves in response to events and objects having no relation to other human beings and their activities are: (1) Gross bodily activity; (2) Manipulation; (3) Vocalization; (4) Food getting; (5) Avoiding; (6) Self-assertion;

<sup>1</sup> Gates, Arthur I, Psychology for Students of Education, pp. 134-147  
The Macmillan Company, New York, 1923

<sup>2</sup> Norsworthy, N. and Whitley, M.T.: The Psychology of Childhood, pp. 41-81  
The Macmillan Company, 1923



(7) Fighting; (8) Submission; (9) Collecting and hoarding; (10) Curiosity.

The social instincts or those which manifest themselves in response to the presence of and situations having to do with other human beings are:

(1) Parental; (2) Mating or sex; (3) Gregariousness; (4) Desire for approval; (5) Imitation; (6) Rivalry.

### 1. Non-social Instincts

(a) Gross bodily activity. This tendency is present from birth, for the infant when awake is almost constantly active. At first his movements involve the large body muscles but later his endless spontaneous and involuntary movements involve all parts of the body. The opinion of leading students of child life is becoming more and more that these movements are unlearned at the outset and that the child's ultimate control of his body is due to his original tendencies. The first two years of the child's life is taken up with the attainment of holding the head steady, sitting, standing, stooping, walking, running, climbing, jumping, balancing, and so on, but their perfection is so slow and their beginnings so imperfect that their instinctive origin is lost sight of and we are inclined to think that we taught the child these accomplishments.

S. in his fourth week when supported so that the soles of his feet touched slightly the surface of a table, lifted his feet rhythmically and strode forward with great "goose steps." Yet it was not until fifteen months later that he was ready to walk. It is of course important that opportunities for exercise and the resulting pain or pleasure be allowed to function in the perfection of control, but if the connections in the nervous system are not present the activity can not be called into being. Since the demand for bodily activity seems to increase with the development of the



nervous system, the muscles and the bony structure, it must follow that as the child grows older the greater opportunity he must have for physical activity. "Nerve currents which later will work themselves out in terms of mental states now result in movement. Curtis found that the very young child can not sit motionless for more than thirty seconds, nor children from five to ten for more than one minute." <sup>1</sup> The small child's nervous system is flooded with tendencies to movement, the expression of which is far more essential to his education than learning to "count four." The tendency to activity is the raw material with which education can begin. "Nothing has been more clearly revealed in our study of child life than that education 'comes in through the muscles.'" <sup>2</sup>

(b) Manipulation or the tendency to handle objects appears soon after birth. The infant pulls, rubs, fingers, squeezes, turns, rattles, throws or fumbles everything and anything with which his eager fingers can come into contact. The small child's emphatic request to "let me feel it" suggests how satisfying the activity must be. Manipulation for its own sake is as spontaneous and without motive as the gross bodily movements. At the outset they are neither constructive nor destructive but are capable of being directed to either. Man's skill and technique in the arts and crafts of life is due to the original nature of his facility in using his hands. The difficulty of perfecting an accomplishment depends largely upon the re-organization of original reactions which it demands. The importance of handwork for pre-school children is obvious and to ignore this phase of development is to deny the child the realization of his abilities.

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<sup>1</sup> Norsworthy and Whitley, The Psychology of Childhood, p. 46  
The Macmillan Company, N. Y., 1923

<sup>2</sup> Waddle, Charles W., An Introduction to Child Psychology, p. 116  
Houghton Mifflin Company, 1918



(c) Vocalization is sometimes classified with manipulation as forms of the tendency to general activity. Whatever the classification, it is true that what has been said about manipulation could be said about the tendency to vocal activity with of course a change in organs and responses referred to. The tendency is present at birth in the form of an instinctive cry, which is believed not to be differentiated for at least two weeks. Then there develops cries characteristic of hunger or anger, and cooings of pleasure, content and comfort. While it is true that the first vocalization or the cry of distress is utilitarian, the babbling sounds which later arise are obviously indulged in for the pleasure which the activity in and of itself affords. It is through the orderly and meaningful arrangement of these gurglings, cooings, and babblings that speech of one form or another is finally organized. "One investigator found that a child at the age of six averages more than a thousand articulate sounds--<sup>1</sup> words or exclamations--per hour." Children differ widely in their progress in language acquisition depending upon many factors--among which are necessity, reward and opportunity to imitate sounds. In direct contrast to the talkative six-year-old mentioned is the little four-year-old whose attentive older sister made it unnecessary for her to talk, so she said nothing whatever.

Crying and laughing are two forms of vocalization which are prominent in childhood. To cry is an instinctive response in situations where helplessness arises. For the infant it brings relief, and so is protective; but as the child grows older he becomes ashamed of his helplessness, so learns to perhaps substitute more manly responses when injury, or disappointment give rise to the overwhelming impulse to burst into tears. To inhibit this natural response to such situations drains heavily upon reserve nervous energy,

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<sup>1</sup>Gates, Arthur I., Psychology for Students of Education, p. 138  
The Macmillan Company, New York, 1923



and it may be unfair to expect a child to always be "manly" in regard to crying.

To laugh is an instinctive response which is not adequately explained as to stimuli or function. It is the infant's response to general well-being and pleasant surroundings. It takes little more than these to cause older children and many adults to burst forth in laughter. Prof. Gates links "mirth with mastery" in contrast to weeping with helplessness.<sup>1</sup> Experience however has shown us that a child who is about to or has burst into tears can by suggestion be made to change his reaction to laughing. F. E. Bolton says, "it is good pedagogy to teach children....to have a good laugh occasionally.<sup>2</sup> It all reacts upon their moods." Whatever may be the origin or function, it is certain that both laughing and crying are nature's provision of safety valves in cases of emergency.

(d) Food getting is one of the first instincts to come into prominence after birth. The earliest manifestations are the sucking movements of the mouth, the turning of the head in hunting for food, and various movements of the mouth and throat to either take in or expel substances depending upon their desirability and the baby's physical state. Within a few weeks the little hands reach for, grasp and draw to the mouth for sampling, any substance which can be reached. To suck the coverlet or his own hands seems to be extremely gratifying even to the well fed baby in many instances. These instinctive activities are soon involved in the general tendency to bodily activity, but the interest in food and the acquiring of the same remains prominent until convention and other interests necessitates its sublimation.

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<sup>1</sup> Gates, Arthur I., Psychology for Students of Education, p. 139  
The Macmillan Company, N. Y., 1923

<sup>2</sup> Bolton, F. C., Principles of Education, Scribners, N. Y., 1910, p. 370



(e) Hunting. Thorndike in "Original Nature of Man" points out the relation of the hunting instinct to that of food getting in primitive<sup>1</sup> man. He describes the hunting activities of primitive man as very similar to those of the higher animals which live by the submission of weaker animals. To civilized man there is no longer particular need of this tendency as a means of acquiring food but as an instinct hunting still exists. In the infant the tendency is manifested in the movements of the head and fingers searching for food. A little later he will scrutinize surfaces for tiny particles which he promptly carries to his mouth. Later evidences of the hunting instinct are found in the pursuit and capture games of children. Since in adult life the tendency may result in cruelty or injustice to both animals and other human beings, it is possible and the duty of the educator to direct it into such paths as will make for ultimate good.

(f) Avoiding. The responses which are spoken of as instinctive avoiding reactions are usually accompanied by the emotion of fear. Fleeing, hiding, dodging, and cowering are some of the forms of response in situations which threaten injury. The reactions which are reflexive in nature such as winking, spitting, and sneezing appear very soon after birth while the more complex responses come only after motor-coordination has been developed to a degree.

(g) Mastery. The child prefers to be master of his surroundings. It is pleasant for him as for the adult to go about his play without any interference or obstruction. Any obstacle in the path of his freedom to do what he chooses, whether it be physical obstruction or restrictions laid down by authority, are met instinctively with vigorous resistance. The infant who reaches for his toy and finds it just out of reach does not turn

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<sup>1</sup>Thorndike, E.V., Original Nature of Man, N. Y. Teacher's College, Columbia University, 1919, p. 52



peacefully to some other quarter for amusement, but stretches, tugs, kicks and squirms until he reaches it or exhausts himself in the attempt. To dominate people and things is a native tendency known as the instinct of self-assertion or mastery. The child is happiest when his playthings are in working order and when his playmates do and say as he dictates. Even the little fellow responds with enthusiasm when a definite task is set, for him to do and no satisfaction is more genuine than that experienced upon the realization that he has done a difficult thing. The value of such an instinct in the educative process is obvious, though it is true that in many schools still every effort is made to crush the tendency.

(h) Fighting "is one of the strongest original tendencies possessed by the human race. It is a secondary instinct in that it presupposes the presence of other instincts. McDougall, Kirkpatrick, and Thorndike all agree that it is aroused when any other instinctive tendency is thwarted." <sup>1</sup> The situations arousing the impulse to fight then may be as varied as there are instinctive responses yet they are always interferences with innate tendencies to act. Fighting is especially akin to the impulses to master or overcome obstructions. "The pugnacious attack is simply the most violent form of the effort to overcome an obstruction in the path of one's action, and inasmuch as it is the last resort, it is a less frequent reaction." <sup>2</sup> To the extremely pugnacious boy every other boy whom he has not beaten into submission is an obstruction to his claim on fistic superiority, so that fighting becomes a mania with him. Because of the difficulties into which fighting brings a boy and his parents and the ban put upon physical encounter by adult society, the instinct is thwarted by every conceivable device of parents. The advisability of such crushing of this strong innate tendency is questioned when

<sup>1</sup> Norsworthy and Whitley, The Psychology of Childhood, p. 54

<sup>2</sup> Gates, A.I., Psychology for Students of Education, p. 141



such authorities as McDougall contributes such a part to pugnacity as a force in the "evolution of social organization."<sup>1</sup> From this very non-social tendency arise the most noble social reactions. To compel a child to inhibit all pugnacious tendencies when they are first strong, because they manifest themselves in the physical level, means to leave him helpless and even indifferent when later on he ought to take his stand for the right. If he has never known what it means to suffer for the sake of winning something which he believed to be desirable, how can he be expected to sacrifice his all for the sake of the greater good? Through constant and patient vigilance on the part of teachers and parents the tendency needs to be modified until pugnacity operates only on the spiritual level.

(i) Submission. In direct opposition to the instincts of mastery and fighting is the innate tendency of submission. It is not the forced submission to superior strength accompanied by shame, anger or jealousy, but the truly willing, satisfying submission accompanied by admiration, awe, reverence and devotion. "Women in general are thus by original nature submissive to men in general."<sup>2</sup> Submission arises in response to situations which are obviously beyond a person's power to master. The child is thus submissive to the parent as the adult is to public opinion.

(j) Collecting and Hoarding. Every child is instinctively attracted toward objects which arrest his attention, to scrutinize them and if their size warrants, to pick them up and carry them away. Later he finds a convenient place where he deposits all treasures thus appropriated, and with him possession is "nine points of the law." At first this collecting and

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<sup>1</sup> McDougall, William, An Introduction to Social Psychology, J. W. Luce & Co., Boston, 1918, pp. 279-291

<sup>2</sup> Thorndike, E. L., Educational Psychology, Briefer Course, N. Y. Teacher's College, Columbia University, 1914, p. 34.



hoarding is aimless for valueless articles are prized as highly as jewels. The mere possession of them is what gives them value to the youngest collector. Later the element of rivalry enters and a period of collecting in order to have a better collection than some one else follows. The third stage includes an interest in the order and arrangement of the things collected, but at no time is the actual value of the objects of great importance. Upon this at first blind and unsocial tendency rests much of our social structure. Everything life has to offer can be claimed by this instinct, and the child who has never known sacrifice and effort to possess and retain desired treasures can never know the fullness of life. Fearing that the exercise of the tendency will develop the non-social inclinations of the child many parents tend to discourage or ignore any manifestation of the instinct. The strength of the tendency and its persistence through life makes such treatment useless and even harmful. "As a natural tendency it necessarily precedes the social instincts. One's value as a citizen depends on one's possessions, not only material, but intellectual and spiritual as well.<sup>1</sup>" Only through teaching plus experience can the adjustment be made between this non-social and the social tendencies. As the child's interest in collecting shifts from spools to beautiful shells and stones within the realm of material things, so can his interest be carried on to desire intellectual achievements, and finally to the attainment of spiritual values.

2. The social instincts are those which arise in response to the presence and conduct of other persons. Those original tendencies which have been discussed may be stimulated by human beings, but would manifest themselves in an environment where there was no association with people. The groups overlap, as has

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<sup>1</sup>

Norsworthy and Whitley, Psychology of Childhood, p. 53



been previously pointed out, but for the purpose of this study the original tendencies to parental behavior, mating, gregariousness, desire for approval, imitation and rivalry are considered the most important social instincts.

(a) Parental. In marked contrast to the more or less vicious non-social instinctive tendencies arises the tendency to tender, protective behavior toward the helpless. It is known as instinctive parental behavior and though it is most markedly manifested in the relations of parents to their children, the responses may arise in the very young child toward any helpless or beloved person, pet or toy. The tendency is not limited to girls by any means, for the crudest, most pugnacious boy may sometimes react most generously tender when the occasion stimulates such a response. The ring leader in a group of boys who derive a great deal of pleasure from tantalizing and actually hurting a smaller boy is the first one to throw his arms protectively around the little chap and soothingly dry his tears when the younger child finally admits his helplessness. Since it is the only innate tendency with which the emotions of tenderness and sympathy are associated, exercise and cultivation of the responses which thus naturally arise, will make a definite contribution to social progress. This tendency to protect and help the helpless is the source of altruism and philanthropic endeavor.

(b) Mating. The mating or sex instinct is one of the strongest original tendencies of man and is the foundation of society's greatest institution--the home. It is often confused with that of parental behavior though they are quite distinct and may be present in very different degrees of development in the same person. Because of the ban formerly placed upon open and free discussion of matters pertaining to sex, there is much disagreement on many outstanding points. Some writers believe that there are evidences of the presence of the sex instinct at birth, while others believe that it appears



with physical maturity of adolescence. Writers have expressed the opinion that maturity occurs on the average before adolescence, and that the appearance of the sex instinct does not depend upon physical signs which accompany maturity. By some it is believed that the beginning of the development of the sex instinct occurs before a child is eight years old and continues though not constantly to increase in strength until maturity. Norsworthy and Whitley give two processes of development which combined make up the "sex impulse."<sup>1</sup> "The first set of processes go on in the physical realm wholly, and consist of the various sensations, nerve disturbances, reflexes, secretions and the like, which together are called the phenomena of detumescence. The second set are in the psychic realm, and include the various attractions, fallings in love and kindred emotions, also the sentiments of disgust, shame and modesty which together make up the phenomena of contrectation. In the normal adult the two sets of impulses are coordinated and synchronized; but during the long development of childhood and early adolescence either set may occur independently of the other."<sup>1</sup> Up to about eight years of age, there are experienced no "contrectation impulses" and what "detumescence processes" which may occur are not accompanied by marked sex consciousness or localization of sensations.

To insure normal and natural development of the instinct, care needs to be given even during the earliest years that no physical or psychical element enters to overstimulate its growth or to debauch the wholesome beauty of sexual matters. The first questions pertaining to sex and reproduction should be answered directly, simply and honestly so that sex is from the start approached openly and without excitement.

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<sup>1</sup> Norsworthy and Whitley, Psychology of Childhood, Brief course series in Education, p. 75.



(c) Gregariousness is another specifically social instinct, for it is the impulse to seek the company of other people. G. Stanley Hall says<sup>1</sup> that "no creature is so gregarious as man." To be alone for any length of time is to the normal person distinctly unpleasant. Even the baby protests violently to being shut away alone in a room and responds with evidences of satisfaction and comfort when reinstated as a member of the group. At first the child shows a preference for adult companionship, but by the time he is three years old desires companions of his own age. It is important that every child have associates who are near his own age in order that the instinct may develop naturally and the child may learn to cooperate, give and take, and live in harmony with other people. Later, at about nine years of age, the tendency takes on a new turn which is called the "gang instinct," or the desire to belong to a specific group, participate in its activities and loyally defend its ideals. The instinct is the foundation of much of social progress but "the administrative authorities have shown of late years a disposition to encourage in every possible way the gregarious tendency. On the slightest occasion they organize some show which shall draw huge crowds, many thousands of people from their work to spend the day in worse than useless idleness, confirming their already over-developed gregarious instincts. There can be no doubt that the excessive indulgence of this impulse is one of the greatest<sup>2</sup> demoralizing factors of the present time."

(d) Desire for Approval. The innate desire for approval and the accompanying tendency to display in order to obtain such approval are manifested very early in life. "The approving words, glances, smiles or attitudes<sup>3</sup> of other people are among the keenest sources of satisfaction." The wee baby

<sup>1</sup> Hall, G. Stanley, Adolescence, Vol. II, pp. 363, D. Appleton & Co., N.Y., 1908

<sup>2</sup> McDougall, Wm., An Introduction to Social Psychology, pp. 298

<sup>3</sup> Gates, A.I., A Psychology for Students of Education, p. 145



shows discomfort when the face of the mother is clouded with disapproval and responds with marked pleasure when she approaches with approving smiles and nods. A little later the child attracts the approval of others by displaying his accomplishments in motor coordinations and linguistic development. It is not so difficult to be patient with or determine the attitude to assume in dealing with the child of the "show off" or "smarty" age when the instinctive origin and impulse to behave in such a manner is appreciated. In childhood competition enters in the desire to display various acts of skill or strength. During adolescence the tendency enters the intellectual and moral realm. At first the person whose approval is prized is usually the mother. Then when the child enters school, the favor of the teacher becomes paramount; with the awakening of the "gang instinct" the opinion of his chosen associates becomes the ruling influence of his life. During the "hero worship" years, the approval of the hero is of course the goal of endeavor. The tendency is one which persists, though changed, through life. It is manifested in a great variety of "direct or subtle ways" both material and intellectual. Just as approval is satisfying, so may disapproval be so torturous to the person who is intensely sensitive to social commendation, that with continued disapproval, there might result nervous disorders and even mental derangements.

The strength of this natural tendency and its value in individual and social development necessitates that it be directed rather than suppressed. To appeal to the love of approval is certainly justified, but the appeal as well as the approval must progress so that the child who at first desires only the favorable opinion of his teacher and classmates, will finally be impelled to right conduct by the force of an ideal regardless of public opinion.

(e) Imitation. The instinctive tendency to imitate is defined by Kirkpatrick as the "general tendency for the perception or image of an action



to produce a similar action." <sup>1</sup>Thorndike says, "The imitative tendencies.... must be explained as the results of the arousal, by the behavior of other men, of either special instinctive responses or ideas and impulses which have formed in the course of experience, in connection with that sort of behavior."<sup>2</sup> So with many writers there seems to be a rather general opinion that imitation is largely a matter of habit except in the cases of what are termed "reflex imitation," as when a person laughs or becomes afraid without cause when such behavior is observed in others. This form of imitation is believed by these writers to be the manifestation of an instinctive "root" from which habitual imitative acts spring.

Kirkpatrick classifies the imitative acts of children into five <sup>1</sup>groups:

(1) Reflex imitative acts which may be observed during the first half of the child's first year. They include only acts which he already has a "physiological tendency to do" and are aroused by sensory stimuli. This bent to imitate reflexively persists through life and is the explanation of such phenomena as the spread of moods.

(2) Spontaneous imitation is concerned with the repetition of acts which are not aroused by other instincts and without any purpose other than an inner impulse to "experience subjectively what has been observed objectively." This form of imitation appears during the first year also and is often combined with reflex imitation.

(3) Dramatic imitation is akin to spontaneous imitation. They differ in that the former is stimulated by ideas or images of earlier perceptions and the activity of reproducing the idea is of the child's own making. The reproduction is not literal as is true of spontaneous imitation. As with spontaneous imitation there is no purpose involved other than the satisfyingness of having put

<sup>1</sup>Kirkpatrick, E. A., Fundamentals of Child Study, p. 160  
The Macmillan Company, New York, 1923

<sup>2</sup>Thorndike, E.L., Educational Psychology, Vol. I, p. 122



into action, however imperfectly, an idea which aroused the impulse. The tendency to imitate dramatically, usually begins during the third year, reaches its height between four and seven, and persists through life.

(4) Voluntary imitation is imitation for the purpose of gaining some end which is satisfying. The impulse is the desired end and the imitation is concerned with the mechanics of the repetition. The small child who spontaneously or dramatically imitates her mother mixing a cake is not concerned with the method; but later, when the desire for a good cake is the stimulus, she painstakingly observes and reproduces the technique involved.

(5) Idealistic imitation is the attempt to act in accordance with an ideal which has been built up and adopted as a copy or standard. It begins as soon as a child forms ideas of what acts are considered more desirable than others, and is largely a matter of training.

Imitation, however specialized it may be, is as a "root instinct" of tremendous value in education. By virtue of it the child is not obliged to go the long way of trial and error. Through it each succeeding generation is endowed with the traditions and customs of their ancestry as guiding and impelling forces. Through imitation the best is available to everyone, and must involve judgment in choice of models, originality and independence.

(f) Rivalry, or the competitive instinct, is that tendency to strive to excel when engaged in the same activity as others. That the tendency is instinctive is shown by the fact that both animals and people attain better records when actually participating in competitions than they do when striving alone. "With us it supplies the zest and determines the forms of almost all our games and recreations; and Professor James is guilty of picturesque exaggeration only when he says 'nine-tenths of the work of our world is done by it... We know that if we do not do the task some one else will do it and get the



credit, so we do it.' Our educational system is founded upon it; it is the social force underlying an immense amount of strenuous exertion; to it we owe in a great measure even our science, our literature, and our art; for it is a strong, perhaps an essential element, of ambition."<sup>1</sup>

The instinct to rival is not marked in all small children, but becomes prominent at about seven years of age and increases in power until near maturity.<sup>2</sup> Some small children even at the age of four do develop what is almost a mania to compete and excell in every activity which is participated in along with other children. By virtue of the tendency any work can be made play during childhood and youth. The dangers of over stimulating the instinct is to place too high a value upon the victory rather than upon the game and thus destroy a child's sportsmanship as well as lay the beginnings of later inferiority complexes, jealousy, envy and hate, for it is impossible for any one to excell always in everything.

With children all competition is at first individual, one striving to outdo another, but as soon as group interest arises, contests between groups will stimulate cooperation, where by prearranged regulations each individual acts in a prescribed manner to contribute to the strength of the group.

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<sup>1</sup> McDougall, William, Introduction to Social Psychology, p. 300

<sup>2</sup> Kirkpatrick, E. A., Fundamentals of Child Study, p. 155



## II. THE DEVELOPMENT OF MOTOR COORDINATION

The first movements of the infant are spontaneous and random, not dependent upon external stimuli, but result from general bodily conditions. Very soon, however, movements resulting from forces within, are modified in response to stimuli from without.

During the second quarter of the first year combinations of movements such as reaching for an object while maintaining equilibrium and even moving the head and body with the hand, are attained. No longer are the movements of the different parts of the body independent of each other but are so coordinated that many six months old children can draw themselves to the sitting position. Thus are associations of sensations and movements formed. Beginning at about four months the rhythmic, coordinated movements of groups of muscles come into prominence, and the child repeats over and over the playful combinations, exercising and associating muscles and senses. Toward the close of the first year, coordination of the larger muscles has developed considerably. The child can draw himself to his feet, hold on to a support with one hand and reach for a toy with the other. Some children can walk with ease, stoop, grasp something and rise again by the time they are a year old. The development during the first year is from the use of one or two groups of muscles to the coordinated use of the large muscles of the arms, hands, body, legs and head in cooperation with touch, sight and hearing. The mental development of the child bears direct relation to the motor development--for example, mentally deficient children are found to be delayed several months in walking.<sup>1</sup>

"Motor tests and items have a fundamental place in developmental diagnosis because they reveal significant facts relating to the maturity of the neuromuscular system."<sup>2</sup> A child's ability to draw with chalk, pencil or crayon is,

<sup>1</sup>Gesell, Arnold, The Mental Growth of the Pre-School Child, p. 210  
The Macmillan Company, New York, 1926

<sup>2</sup>Gesell, A, p. 24.



in most mental tests, taken as indicative of his motor development. With small children drawing is usually a play activity. Not until the child is a year old does he take any interest in scribbling and at eighteen months spontaneous scrawling is universal. The earliest drawing is long, vertical strokes made with a waving gesture, the pencil held like a hammer. Horizontal strokes are accomplished much later. By the eighteenth month circular swings are introduced but not until the middle of the third year is the child<sup>1</sup> able to make even an irregular circle. Three year old children will try to follow an outline but with little success while four year olds can hold to outlines with considerable precision if the forms are simple. By the time a child is five years old he can keep well within bounds in tracing the points<sup>2</sup> of a star.

Baldwin and Stecher's six centimeter walking board test for skill in general bodily control gives the results that at three years the average ability was to slide the feet along sideways at right angles to the board, at four years they alternated feet, slowly and lost their balance frequently, and at five years were able to walk it imperfectly and without confidence.

Other tests also indicate that the period of greatest development is between three and five years.

### III. SENSE PERCEPTION

The original equipment of the child includes sense organs, nerve connections and brain centers, the stimulations and functioning of which give rise to the simple mental state of sense perception. At birth the mechanism is quite imperfect, but through development from within the sense organs and the connections are completed so far as original nature intended they should be.

<sup>1</sup>Major, D. R., First Steps in Mental Growth, p. 51, The Macmillan Co., N.Y., 1915

<sup>2</sup>Baldwin and Stecher, The Psychology of the Pre-School Child, pp. 74-105  
D. Appleton & Company, N.Y. and London, 1925



Experience and such factors as development in interest, attention and discrimination contribute to the distinctness of perception. At birth the sense organs of touch, taste and smell are ready to function, though imperfectly. A slight touch upon the nostrils brings grimaces of displeasure, while taste and smell are aroused only by strong flavors and odors. The eye and ear are quite imperfect as sense organs, but begin within a few days to receive some impression from strong stimuli. During the first two or three years inner growth perfects the sense organs so that development in perception during later years is due to other factors. At first the undifferentiated flood of sensations sweep into consciousness so unlocalized and meaningless that there results only the general feelings of satisfaction or annoyance. Sounds are mere noises, loud or faint; vision is light, dim or brilliant; discrimination in tone, shape, size or color comes much later.

Through experience with objects and acquaintance with the different sensations of vision, touch, sound, taste and smell, which these objects can arouse simultaneously, there results in consciousness perceptions of things. To the extent that wide experience in sensory acquaintance is afforded is the development of sense perception possible.

Other factors contributing to the perfection of sense perception are attention and the ability to discriminate. With fleeting attention there is also inaccurate, indefinite and incomplete impression. Only when attention can be caught and held can the sense perceptions be clear and definite. Lack of discrimination, the inability to discover likenesses and differences, retards development in sense perception. To encourage a child in practice in such discrimination is to help him accumulate a wealth of mental content essential to intellectual growth. Not only are children's sense perceptions limited, indefinite and incomplete, but it is observed that the stimulus necessary to



give rise to a percept must be more intense than in the case of the adult. For the child to recognize a familiar object, he must see, feel, and hear it and in the same way as he formerly knew it to be. Because of what is termed "mental set" or the tendency of a state of mind to continue for at least a limited period of time, sense perceptions of children are likely to be colored by their passing mental states. Thus inaccuracies in perceptions result which may be the underlying causes of fears and exaggerations or lies. What may be called a type of illusion is also common with children due to the strength of the influence of mental set upon sense perceptions. A child becomes desperately hungry in the midst of his play and his mind turns to dinner and circumstances surrounding it until finally he is positive that he hears his mother announce the anticipated meal. He rushes into the house only to find that it is but ten o'clock and mother is on the front porch chatting.

The specific development of perception is difficult to trace, and different investigations emphasize different phases, but there are some facts now given general acceptance. With the development of discrimination the perfection of vision continues up to sixteen years of age and beyond, though brightness and differences in some primary colors are perceived during the first six months. Space perception begins at about three months and continues to develop for eight or nine years. The sensitivity of the skin is more pronounced in childhood than later unless practice necessitated by blindness or some other factor contributes greatly to its perfection. Sound perception varies so greatly with individuals that it is difficult to find facts of general application except that the development during the early years of childhood is marked, and that age and practice contribute to discrimination.

While individual differences determine somewhat the development of sense perception, it is the duty and opportunity of the educator of pre-school



children to get them to observe purposefully and to provide for their experiencing sensory stimulation in as many fields as is possible in order to develop habits of observation and a fund of perceptions. Not only must children be exposed to an environment of this sort, but conversation must be utilized to insure rich, definite and detailed perceptions.

#### IV. ATTENTION

The original equipment of the child provides the interests and the urge to prolong experiences which he finds interesting, and we say that his attitude is that of attention. The tendency is essential to the development of other mental states. The stimuli which give rise to the state of attention are those of intense, strange, or rhythmic nature and those to which he has the tendency to respond instinctively. Thus the situations which arouse a child's attention differ with his age, development, experience, instincts and abilities. The attention of the little child is of the sensory type. He attends to the characteristics of an object which satisfy his craving for sensory experience. He is occupied with the color, shape, size, feel and even smell and taste when the adult is concerned primarily with associations, images and memories which the object arouses.

The attention span of the little child is very limited. Though it may seem that the child gives his attention to his blocks for long periods of time, observation will disclose that he is actually giving his attention to numerous stimuli, such as the pictures in the blocks, the sensations produced by running his fingers along their edges, and so on,- in rapid succession.

It is noted also that the pre-school child can not give his attention to more than one object or idea at a time. It is useless and unfair to tell a small child to take his paper and crayon, sit in a specific place at the table and draw a circle; for unless the procedure has become habitual by repetition, he will do only one of the specified acts. While the attention of the child is limited in span, duration and intensity, the number of lines



along which he eagerly gives his attention is much greater than is true of the adult. Everything is new and his arising instinctive tendencies are impelling him unceasingly in first one direction and then another.

Another characteristic of the attention of the small child is that it is wholly spontaneous; that is, he attends to those things which because of their own immediate attraction impel him to respond instinctively to them. What interests him, he can give his attention to and only through gradual training and the development of his original nature are his interests carried from the crude to the ideal, from the selfish to the social.

## V. ASSOCIATION

The bonds which arise connecting and fusing the elements of sense perceptions into concepts and the process of binding the same into mental experience, the whole of which can be recalled by recalling a part, is called association. The process of association is present in all intellectual development and is essential to all mental processes from the first simple ideas formed by the infant up to the mental feats of a genius.

Association occurs in the mind of the child from the first reception of sense impressions. "Any number of impressions, from any number of sensory sources, falling simultaneously on a mind which has not yet experienced them separately, will fuse into a single undivided object for that mind. The law is that all things fuse that can fuse, and nothing separates except what<sup>1</sup> must." From this mass of related, united experience, certain parts stand out more prominent than the rest and they in turn are fused with other prominent factors.

Writers and investigators record evidences of first associations occurring within the first week. These earliest connections are naturally

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<sup>1</sup>James, Principles of Psychology, Vol. I, p. 488, Henry Holt & Co., N.Y., 1890



related to the all important activity of food getting, and continue to center and develop about this process for the first two months. Age and experience contribute rapidly to the wealth of the fund which the child accumulates and uses constantly. The development during the first year is from associations between indefinite masses of sense experience to associations between sense percepts and motor responses and even images.

## VI. MEMORY

Memory is the capacity to recall associated elements of mental experience. Its roots are in the original, physiological structure of the cortex, and a person's capacity for retention is dependent upon the type of brain tissue which heredity bestows upon him. Training cannot then improve retentiveness, but can greatly increase the ability to memorize. The difference in these two phases of memory is the factor of time. Memorizing is the ability to reproduce material without any appreciable lapse of time between the impression and the expression; while retention is the capacity to recall after the lapse of time.

Retentiveness during the first few years seems to be a matter of organic change rather than conscious, for the tremendous influence of early experiences upon subsequent behavior is an established fact, yet studies of the memories of infancy and early childhood show that adults can rarely recall specific memories of the first few years. Experimentation shows that the first years of childhood are the most important in determining later conduct, so it is concluded that the early experiences have left their trace below the level of consciousness. G. S. Hall in "Notes on Early Memories" refers to this tendency of the memories of infancy as a "lapse to vague and evanescent emotions."<sup>1</sup>

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<sup>1</sup>G.S. Hall, Notes on Early Memories, in Ped. Sem. Vol. 6, pp. 485-512



During infancy memory is comparatively weak which is attributed by D. R. Major to five characteristics of the infants mental life: (1) Associations formed are weak; (2) experiences are not accurately localized in time and space; (3) memory images are aroused by "sense-stimulus" or peripherally rather than by other images or centrally; and so are confused with sense perceptions; (4) absence in the baby's mind of "trains of imagery;" and<sup>1</sup> (5) the absence of voluntary effort to recall.

Experiments indicate that from the time a child shows any capacity in remembering words or sounds impressed upon him, there is an increase in memory span until adolescence and later. This development is neither constant nor gradual, but is dependent largely upon association and attention which in turn are dependent upon age and experience.

The earlier memories developed are for objects, sounds, scenes, motion and like sensory impressions while those for ideas, words, and<sup>2</sup> "abstract concepts" come much later. The frequency and exactness of the various types of memory are dependent upon the prevailing interests and type of imagery of the period. Findings in the experiments of Smedley indicate that during the early years, auditory memory is stronger than visual, that after nine years it improves slowly up to fourteen years, while visual memory<sup>3</sup> seems to develop up to fifteen or sixteen years of age. Individual differences are great, and study of the prominence of types of memory are recognized as of value in vocational guidance.

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<sup>1</sup>Major, D. R., First Steps in Mental Growth, pp. 208-225

<sup>2</sup>Waddle, C. W., An Introduction to Child Psychology, p. 286

<sup>3</sup>Smedley, Report Department of Child Study (Chicago Public Schools), No. 3



## VII. IMAGINATION

So far as can be determined imagination does not enter into the early mental activity of the infant. The period is given over completely to the absorbing business of storing up a wealth of sense impressions. The first two years are often spoken of as the matter of fact period when things are as they appear to be. What are sometimes taken to be the first imaginings of the infant are truly often memory images or mental pictures of former experiences called up through associative processes by the actual presentation of some part of that earlier experience. Memory and a fund of experience it would seem must precede true imagination, for imagination as distinguished from memory is the activity in which images may arise freely without order or relation to reality while memory is the reproduction of original experiences.

The beginnings of imagination are so bound with memory that it is difficult to recognize their first appearances. Dr. Major, through a close study of the activities of his child, recognized imagination in "five classes of the infants activity:"<sup>1</sup> (1) As early as the fifteenth month the child showed an element of imagination in devising plans to bring about desired ends. (2) In the eighteenth month he showed originality in his expressions of desire. (3) He engaged in imaginative play during the twenty-fifth month. (4) In "uncontrolled play" there entered the element of constructive imagination during the third year. (5) "Assimilative imagination" or the fusing of two images, perceptual and memory, to form a new image, was recognized early in the third year.

When the child's mind does finally shake loose from the shackles of literalness at about two and a half or three years, there comes a period of reveling in imaginative flights, when there is almost no limit to make believe,

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<sup>1</sup>Major, D. R., First Steps in Mental Growth, pp. 229-238, N. Y., The Macmillan Company, 1915



fabrication, and imagined experiences with imaginary companions. This unrestrained imagination tends to decline during later childhood through widened experience with reality and educational training. The fanciful imagination of the child between three and seven years becomes more matter of fact though still productive from ten to thirteen years. During adolescence the developed emotional life again adds the elements of intensity and fancy similar to those of the first period, and daydreaming becomes a delightfully satisfying experience. The imaginings of the adolescent differ from those of the small child in content. Those of the later period are concerned primarily with persons, their activities, aspirations and plans rather than with fairies and impossibilities.

Progress is dependent upon creative, productive imagination. Through experience and training the child learns the difference between the real and the fanciful, and learns to turn daydreams into actuality. To crush a child's imagination is to destroy one of life's greatest gifts, a source of pleasure and agent of individual improvement. "Imagination has the power to alter the face of the world, to bridge distance, to annihilate time; like the artist it is skillful to glorify and to enrich. On the moral side of life, it knows how to comfort and encourage, to inspire and control, to<sup>1</sup> animate, and to rejoice."

#### VIII. SPEECH DEVELOPMENT

To vocalize is a phase of the instinctive tendency to manipulate, and is based upon a tendency to respond to stimuli by movement and for mental stimulation to find expression in motor activity.

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<sup>1</sup> Quoted by Norsworthy and Whitley, Psychology of Childhood, p. 167



The factors which contribute to the modification and development<sup>1</sup> of this "expressive instinct" are play, imitation and necessity.

The stages in the development of oral language as given by Major and Kirkpatrick are readily traced. The first vocalization is reflexive crying in expression of discomfort which soon takes on variations so that the cry of hunger is quite distinguishable from that of anger. A little later (the sixth week recorded by Major) gurglings, screams, and cooings appeared as evidences of energy or comfort. During the first quarter of the first year there developed an understanding of soothing and caressing sounds as well as other tones expressive of emotions. An association of words soon follows the understanding of tones. The "playful stage" begins with the second quarter of the first year when what is called "pre-linguistic" babbling comes into prominence. During this period the child may make nearly every sound of every language. On the last quarter there appears the tendency to imitate the sounds heard in the speech of others. Sometimes it is voluntary in response to urgings and again seems to be almost automatic. Tone, inflection and even rhythm are frequently imitated long before separate words are articulated. Every baby at some age has his little trick of "all-but-saying" "all gone" or "so big," but often the tendency is so pronounced that the infant's tireless repetition of sounds takes on the characteristics of adult conversation.

At this same time an understanding of the content of the speech of others is recognized and often a nine months old baby will respond in action to requests or statements.

The word learning stage may begin in the last few weeks of the first year or may be not until the second half of the second year, but as soon as a

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<sup>1</sup> Kirkpatrick, E.A. Fundamentals of Child Study, pp. 239-253



child begins to use sounds and words purposefully and uniformly to express wishes or ideas the word learning period is entered upon.

Pronunciation is a matter of motor coordination, auditory perception and memory. Every investigation yields interesting, though largely individual facts, in respect to the order of development of pronunciation.

The rate of acquiring vocabulary is dependent upon the child's interests. There are periods of rapid increase as when interest is given primarily to objects and acts, and periods when only few new words are learned when interest is occupied with the use of words already acquired or with a new form of physical activity.

The kind of words found in the vocabularies of children of given ages is dependent largely upon the interests of the period. At first when interest is in objects, nouns predominate; later when interest turns to action, verbs come into prominence, though for a time nouns are used as verbs, as are also prepositions.

Sometimes groups of words are used before single words but more usually the opposite is true, and single words are used with varying tones and inflections along with existing circumstances to convey a great variety of meanings. The first step in sentence making is the substitution of words for inflections and gestures. With development of mental graps the child separates a situation into its elements, recognizes their relation and chooses words and arranges them to express the situation. Thus "car" said entreatingly with arms raised as father goes to the door later becomes "go car Dada" and finally "I want to go in the car with Dada." Other observations of the development of language during the sentence forming period is that: arrangement is determined largely by imitation though interest and attention are factors; that "most of the child's first sentences have no subject, many are without an



assertive verb, while only a few are without an object;" and that "the length of sentence is doubled in a few months, and complex and compound sentences appear and increase in number, showing rapid growth in mental grasp and span of consciousness."<sup>1</sup>

## IX. REASONING

By reasoning is meant the process of purposefully organizing ideas in new ways in order to meet satisfactorily new or puzzling situations. The newborn baby does not reason because of his poverty in respect to the raw materials of logical thinking, ideas, images, and his lack of some power to control them. Very soon however his fund of percepts, developed associations and images and his instinctive tendency to mental activity give rise to thought, comparisons, and judgments. Before many weeks have passed the infant who has received attention of a particular kind when he cried will purposefully cry to bring response to new desires.

As soon as children begin to talk, we see evidences of generalizing, classifying and reasoning in their endless questionings and applications of names to new objects. They constantly gather new truths from their own practical experiences, from older playmates and adults usually through questionings, and through their own mental activity.

The reasoning of children is inferior to that of the adult because of his "poverty of experience and of ideas; the preponderance of sensational and affective elements in consciousness; domination by the instincts; greater susceptibility to suggestion; relative lack of control over the mental processes in general; ignorance of the many sources of error in thinking; vagueness

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<sup>1</sup>

Major, D. R., First Steps in Mental Growth



of ends; incompleteness of concepts; total lack, during earlier years, of<sup>1</sup> knowledge of the logical forms of thought."

The faulty reasoning of childhood is due to the inaccuracy and ineffectiveness of the processes rather than to the absence or functional difference of the activity. It is quite generally accepted that by the third year the normal child is in possession of and using all the abilities and processes of adult reasoning, but because of immature judgment and attention, limited ideas, faulty concepts, and lack of control of consciousness his results are not reasonable.

With age, experience, development of other elements of intelligence, and practice in the processes of reasoning the capacity improves in completeness, accuracy and definiteness. Little is known of the stages in development of reasoning. There appears to be marked advance in the ability during puberty but exactly what contributes to this acceleration is not definitely known. The educator can assist even the small child in accomplishing rational thought by helping him to acquire ideas, concepts and use them thoughtfully, by urging him to learn to "reason by reasoning," and most of all be absolutely honest with him in giving correct ideas and guiding his reasoning.

#### X. FEELINGS AND EMOTIONS

Every mental process has its affective or feeling factor, which may be so prominent that the significance which the mental experience may have for consciousness is the way in which it affects us. Affective states are divided into two groups: feelings either pleasant or unpleasant which arise in connection with sense experiences; and emotions which are experienced in connection with ideas.

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<sup>1</sup>Waddle, C. W., An Introduction to Child Psychology, p. 294



The popular theory of general acceptance as to which situations give rise to pleasure and which displeasure is that "free, unhampered gratification of original impulses"<sup>1</sup> are accompanied by pleasure while interruption or restraint of such impulses are annoying. Writers list independent "annoyers" and "satisfiers" such as physical injury, bitter, sour and salty tastes, bad odors and intense sensory stimuli as sense impressions which call forth displeasure; and physical well-being, sweet tastes, and moderate stimulation of sense organs as giving rise to expressions of pleasure.

The expressions of feelings during the early years of childhood are free and unrestrained, and take a prominent place in the child's activities. The first expressions are of unpleasant feelings, but those of pleasure, while mild in comparison with the violence of the former, are early distinguishable. The first expressions of displeasure are likely in response to over-stimulation of the sense organs of touch. The first evidences of pleasure are associated with the food taking process, and sensations of touch, taste and temperature. Both reactions are noted within the first few days. The number and frequency increases rapidly until children are often spoken of as "playthings of their feelings." "They are abandoned to joy, grief, passion, fear, and rage. They are bashful, show off, weep, laugh, desire, are curious, eager, regret, and swell with passion....There is color in their souls, brilliant, livid, loud.<sup>2</sup> Their hearts are yet young, fresh, and in the golden age."

The emotions are also part of the original equipment of the child. Every person is born with the possibility of experiencing anger, fear, joy, grief, jealousy, hate, awe, and all other emotions. The theory that each instinctive tendency has its accompanying emotion is far from true for some instinctive activities may be accompanied by half a dozen distinct emotions

<sup>1</sup>Major, D. R., First Steps in Mental Growth, p. 77

<sup>2</sup>Hall, G. S., Adolescence, Vol. II, pp. 59-60, D. Appleton & Co., N. Y., 1904



following in rapid succession, and again the same emotion may arise in connection with several instinctive tendencies.

Because of the instinctive basis of emotions, age and experience bring continuous change in the emotional life of the child. During infancy the affective elements of consciousness are more transient, more easily produced or inhibited by suggestion than in later childhood or adult life. The outward expression of emotions proceed in their development in two waves, the crests at four or five years and again just after puberty. With the development of general mental and motor control, and the decline or modification of instinctive tendencies the emotional life becomes more and more stable. With these changes and development there are correlated advances in refinement of the affective processes which give rise to higher emotions or sentiments which are fundamental to moral, religious and aesthetic attainment.

## XI. CHARACTER

Character is "a deliberate responsiveness to social need, a responsiveness which looks toward a social ideal that has been consciously adopted by the individual as his own. Such responsiveness is not original in man's nature. Neither can it be forced upon a man by law or custom."<sup>1</sup>

Character is a product of growth and development in a social environment, the first few years of a person's life being the all important period of beginnings, when the foundation of character is set.

The mind of the baby as compared with that of the adult is without organization, but with the multiplication of associative connections between situations and responses habits are formed, providing the responses are regular, intelligible and effective. These first habits are the basis of morality. "A moral being can be produced only by a moral environment."<sup>2</sup> If the child

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<sup>1</sup>Hartshorn, H., Childhood and Character, p. 229, The Jordan and More Press Press, Boston, 1919

<sup>2</sup>Same, p. 9



is dealt with unjustly or erratically, so that his actions are not determined by standards or habits, but by whim or fancy; how then can he develop into a democratic, social being? Regularity in adult response fosters not only the development of ideas of justice and order but of definite habits of self-control.

The baby's consciousness at first is the "common consciousness" of the group in which he lives. The order of his life is determined by other persons. All of the early mental processes are but reflections of the processes of other minds. His attitudes, moods, and emotions are colored by the attitudes, moods and emotions of his associates.

The first step in the discovery of selfhood is the identification of his body as different from other objects. Then he becomes conscious that certain experiences are his, and that others respond with either approval or disapproval to his activities. With the use of language the baby identifies himself the thinker with the doer and consciousness becomes individual.

The habits and attitudes, standards of goodness, ideas of justice and love which this new self acquires during the next two or three years determines largely his ability to understand the existence of an ideally, just, permanent and loving Standard, and his success in directing himself toward the same.

After selfhood has emerged from the "common consciousness" there is necessary a return to the "feeling of oneness with the group,"<sup>1</sup> a consciousness of other selves, of God individualized and personal a member of the group, before the foundations of character are firmly set.

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<sup>1</sup> Harthorn, H., Childhood and Character, p. 21



## CHAPTER II

### THE NATURE AND FUNCTION OF PLAY

#### I. DEFINITION OF PLAY

Play, its nature and values, has been widely discussed by educators, churchmen and laymen. Extensive volumes by the hundreds have been written advancing theories and definitions, yet Kilpatrick remarks, "that in all educational discussion there is scarcely a word upon whose meaning there is so little general agreement. Thorndike says, 'Most of the disputes about the service of play in education hark back to a vagueness in defining what play is to be taken to mean.'<sup>1</sup>" Thus it seems advisable before undertaking a discussion of play that a working definition be adopted. Some of the definitions which have arisen from the various theories which will be discussed later are given by Bowen and Mitchell as:

"Schiller: The aimless expenditure of exuberant energy.

Guts Muth: The natural exercise and recreation of body and mind.

Froebel: The natural unfolding of the germinal leaves of childhood.

Ruskin: Exertion of body or mind, made to please ourselves without determined end.

Spencer: Superfluous actions taking place instinctively in the absence of real actions.

-----: Activity performed for the immediate gratification derived, without regard to ulterior benefits.

Groos: Instinctive practice, without serious interest of activities that will later be essential to life.

Strayer and Norsworthy: The manifestation of instincts and tendencies not immediately useful.

Seashore: Free self-expression for the pleasure of expression.

Hall: The motor habits and spirit of the past persisting in the present.

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<sup>1</sup>Bowen and Mitchell, The Theory of Organized Play, p. 194, A. S. Barnes Co., New York, 1924



Lee: Instinctive activity looking toward an ideal.

Dewey: Activities not consciously performed for the sake of any results beyond themselves.

Gulick: What we do because we want to do it.

Colvin and Bagley: An act performed spontaneously and for no conscious purpose beyond the activity itself.

Webster's Dictionary: Any exercise or series of actions intended for amusement or diversion.

Standard Dictionary: Action without special aim.<sup>1</sup>

In spite of the varying points of view indicated by the definitions given, there are some aspects of play in which educators generally agree.

First: all agree that play is a form of activity, not passivity. In play there is the element of active interest. When interest is gone, play immediately becomes work because of the change of attitude. Second: Play is not limited to any one field of activity. It may be physical, mental or spiritual. Third: There seems to be a rather general agreement that in play the satisfaction gained arises from the activity itself as an end.

Utilizing the ideas contributed by these educators, play shall be considered in this paper: Activities which of themselves give satisfaction to the present physical, intellectual and spiritual needs of an individual.

## II. DISTINCTION OF PLAY FROM WORK

A small boy who always was allowed a play period between supper and bed time one evening spent that time playing with the soap and water as his mother washed the dishes. Their laughter and merry chatter indicated that they were having a good time. However, when they were through, the child said, "Now let's play!" "What have we been doing?" questioned the mother.

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<sup>1</sup> Bowen and Mitchell, The Theory of Organized Play, pp. 194-195



"Why working," came the answer. What makes an activity play and what makes it work? Is play always play, and is work always work? The usual distinction made between work and play is: When an activity in and of itself is worth while and brings satisfaction, it is play; while if the activity itself is not the end desired, but is engaged in only for the sake of some other worth while result, it is considered work. Thus addition and subtraction problems which are work when they must be handed in to the teacher in order to avoid being kept after school, become play when done as a part of the absorbing business of make-believe store keeping. Whether an activity is play or work is not a question of the form of the activity, but of other existing circumstances which determine the attitude of an individual in regard to the activity approached.

What is play to a child may be work to an adult. The conscientious mother who has forgotten how to play faces the children's play hour with dread. She toils through "The Farmer in the Dell," she cringes before "Cat and Rat," and at last returns to her household duties with anticipation of the pleasure they afford. The form of the activities may be similar, but the interest of the adult does not give rise to the attitude of play in regard to the childish games.

What is play to one person may be work to another of the same age. The factor which determines their attitude is their individual predispositions or capacities. Every one knows two persons of absolutely contrary reactions to grand opera. The one leaves the evening's performance refreshed and glowing with the thrill of the aria, while the other owes his survival to the refreshing nap which fatigue forced upon him. The one was able to appreciate that form of art by virtue of his training or natural tendency, while it was all lost to the other and there resulted only discomfort for him.



Training may change an individual so that an activity which once was work is found to be play. Practicing on the piano may for the beginner be classed as drudgery, but within a few months with the mastery of technique, the activity may become the highest type of pleasure giving play.

What is play in the morning when one is rested may be work after a day of toil. The postman who leaves his home in the morning with his shoulders back, his head high, with every nerve keen to the delight of vigorous physical manipulation, may return in the evening with sagging shoulders and dull step, walking only because it's the sole means of arriving at his place of rest.

The subtle frame of mind in which an activity finds an individual may determine whether that activity is regarded as play or work. A small child who has for several days laced his shoes with the eagerness of the spirit of play, may on a gloomy morning complain that "It's too hard for me to do."

Habit is another determinant of the attitude toward activities, making some work and others play. A child who has always put away his toys after play-time continues to do it as a part of the play itself, while the child who has never formed such a habit does it only under compulsion.

Alice Corbin Sies restricts play to activities which as a whole move "joyfully forward along the line of preference, obstacles and checks being met cheerfully and constructively. When necessity of better adaptation to life brings breaks in a smoothly running activity work is involved to bridge the difficulty." <sup>1</sup> Activity which is spontaneous then is play, but as soon as compulsion from the outside, fatigue, natural inability, distracted attention, or other obstacles enter changing the individual's attitude toward the activity, that which was play becomes work.

"Play," says Dr. Johnson, "is an attitude which can permeate all of life." That is, a person can so build up an attitude that life's problems can

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<sup>1</sup>Sies, Alice C., Spontaneous and Supervised Play in Childhood, p. 15  
The Macmillan Company, New York, 1922



be met and conquered in the spirit of play. In this connection one thinks of Thomas A. Edison, the great man of the laboratory, who labors for long periods of time so absorbed in his activity that food and sleep are forgotten, and he calls it all play. He approaches his work with the eagerness and spontaneity of play and it all "moves forward along the line of preference." But could Mr. Edison dig ditches for water mains in the same attitude of play? Likely not, for his muscles would fatigue, his desires would be centered elsewhere and compulsion to dig and to continue to dig would stifle all possible spontaneity. Digging ditches would become work in spite of the attitude of play which "permeates" his chosen activity.

### III. THEORIES

There are as many definitions of play as there are theories, and nearly as many theories as there are writers. The outstanding theories which have received widest recognition will be reviewed.

The educators and churchmen of medieval times believed that play was an expression of the "original sin" of humankind and that the aim of education was to suppress all instinctive tendencies. "A young girl should never play; she should weep much and meditate on her sins."<sup>1</sup>

Then there came what is spoken of as the revival of learning during the sixteenth and seventeenth centuries. The new revolted against the old, and swung to the other extreme. Rousseau writing in 1762 protested against the old method of education, and based his system upon "nature....which ought not to be opposed." He expressed the most modern theory of education and a very likely understanding of play for he is quoted as saying in regard to play, "All their motions are so many wants in their constitutions, which are endeavoring to gain strength."<sup>1</sup>

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<sup>1</sup>Bowen and Mitchell, The Theory of Organized Play, p. 186



Later in the same century the theory that play is the "aimless expenditure of exuberant energy"<sup>1</sup> was advanced by Schiller (1759-1805) a German poet and philosopher. It was the first theory generally accepted and by virtue of its simplicity became very popular. It fitted into the philosophy of the working man who thought that the boy could just as well use his energy chopping wood as playing ball, and that the girl could just as well tend the baby as play with her dolls. The theory has done much to oppose the play movement, though there have been occasions when adults have in desperation provided playful means for the harmless release of the excess energy of youth, but only with the idea of preserving property. Playgrounds have been known to come into existence as an economy measure in some school systems, for the untrained man can sometimes best understand a thing when his pocket-book is involved. The theory, however, cannot withstand careful consideration, for in the first place it is only the work-bound adult who can claim that play is aimless. The manipulations of the baby, and the shouting of the overjoyed school boy may seem to be, but cat and rat, tennis or tag have just as definite aims as have scrubbing the floor or hoeing potatoes. Children do not necessarily play because of any excessive fund of energy. The sick children in hospitals play with whatever material there is available. The most undernourished children of the city slums are often found to be the most active on the playground and the exhausted child will stagger to his feet for one more tustle with father before being dragged off to bed. The superfluous energy theory does not explain the variety of the forms of play or the intense interest associated with play.

Froebel (1782-1852) the beloved father of the kindergarten, perhaps did more than any other one educator to release the child from the medieval

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<sup>1</sup>Curtis, Education Through Play, p. 2. The Macmillan Co., New York, 1915



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doctrine of suppression of natural tendencies. He said that play was the satisfaction of the hunger for activity and based his whole system upon the natural unfolding of the spirit through expression in play. He believed this unfolding took place in a definite sequence and uniformly in all individuals and that with each development there arose a new need which was satisfied by a definite form of play activity. He made much of manipulation and imitation but made his greatest contribution in songs and stories.

Guts Muth a German teacher of physical training early in the nineteenth century took up the recreation theory of play which had been defined a century previously by an English philosopher, Lord Kames. Guts Muth said that play was "the natural exercise and recreation of body and mind."<sup>2</sup> This theory is based on the physiological principle that a change from work to interesting and desired activity is more restful than idleness. This has always been a popular theory in Germany. Professor Patrick of the University of Iowa<sup>3</sup> has taken it up and contributed much to its explanation. It is a theory of the play of adults, for it deals with the activities which rest after fatigue. It is quite contrary to the excess energy theory of Schiller. The one has to do with play as an activity of those who have more energy than the common occupations of life can care for, while the other has to do with play as an activity to refresh the exhausted. Professor Patrick says that the common vocations of civilization which involve activities recently acquired by the human race, such as complex reasoning and fine coordinations are more fatiguing than those activities which are racially older. Thus he explains

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<sup>1</sup>Kilpatrick, W. H., Froebel's Kindergarten Principles Critically Examined, The Macmillan Company, New York, 1916

<sup>2</sup>Bowen and Mitchell, The Theory of Organized Play, p. 194

<sup>3</sup>Patrick, G. T. W., Psychology of Relaxation, Houghton & Mifflin Co., Boston and New York, 1916



why laborers can work longer hours than can professional people, and why camping, hunting, fishing and boating are more completely restful than reading, theatre going, or card playing. This theory makes a good contribution, but it does not account for the college professor who finds greatest relaxation in a family game of bridge or his relief upon the completion of an enforced camping trip. It does not have to do with the play of children but with the recreation of adults. We will find that the two have a common basis and can be explained by the same theory.

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According to Bowen and Mitchell,<sup>1</sup> Spencer had no part in the theory of Schiller's which is commonly called the Schiller-Spencer Theory, but due to mis-translation of the German he was identified with the Superfluous Energy Theory. Rather, the little which Spencer wrote concerning play indicates that he based play upon the instincts of rivalry and love of victory. The above writers quote from an English magazine of 1860 in which Spencer said that the instincts impel to "sportive activity" and that it satisfied these instincts more or less, for the satisfaction of the play of adults and children alike lies in the achieving of victory.

The Instinct Theory of play finds its basis in what is called the instinctive tendency to activity. The demonstration of these activities is determined by the physical development. Thus a very small child who has the ability to grasp, is impelled by his instincts to open and close his hand grasping his own thumb. Later, his arm muscles are so developed that he jerks at or swings about the object grasped, the development determining the activity and the activity making possible further development.

Dr. G. Stanley Hall contributed the atavistic theory of play which is a special application of his recapitulation theory of original nature.

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<sup>1</sup>Bowen and Mitchell, The Theory of Organized Play, p. 187



He maintains that play activities are but the "motor habits and spirit of the past of the race, persisting in the present, as rudimentary functions sometimes of and always akin to rudimentary organs....We rehearse the activities of our ancestors, back we know not how far, and repeat their life work, stage by stage. This is why the heart of youth goes out into play as into nothing else, as if in it man remembered a lost paradise."<sup>1</sup> Dr. Hall continued further to maintain that "play never practices anything racially new," and that children's play "recapitulates all the activities of the race in the order in which the race learned them."<sup>2</sup>

The criticisms of this theory of play are the same as those made upon Dr. Hall's general recapitulation theory: it accounts for only the lower forms of play activity; it fails to explain why some racial activities are skipped in the play life of some children, and why little boys play with airplanes before they show any interest or ability in building tree houses.

Karl Groos, a Swiss psychologist, made a great and valuable contribution to the study of play. His two volumes published between 1895 and 1900 represent a vast amount of research of the play of both civilized and savage people. Because of the scientific method of his study his views have been accepted with confidence and have done much to modify the educator's attitude toward play.

He favors the Instinct Theory of play and contributes the idea that the long period of youth given to man is for the purpose of play in order that he may develop into the type of being which he is supposed to be, and, that play is actual preparation for the business of life. He compares insects which

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<sup>1</sup>Hall, G. S., Youth, p. 74

<sup>2</sup>Bowen and Mitchell, The Theory of Organized Play, p. 192



come into the world fully equipped with their instincts and never play with man who comes only partially endowed and is given a long period in which to play compelled by his instincts as they appear. According to Groos it is this factor which gives man the ability to educate and increase his abilities and to progress from generation to generation.<sup>1</sup> Play is essential to the development of higher intelligence, and through the use of tendencies and abilities as they appear are other higher capacities called into being.

Groos' mistake, which has called criticism and ridicule down upon his contribution, was his declaration that play was preparation for the "serious business of life," for it is not likely that nature provided mankind with the long period of immaturity in order that he could practice running sufficiently to catch street cars in mature life.

Miss Appleton has advanced a "biological theory" of play which bases play upon the structure of the body and the satisfaction of the needs of the body as it develops. "Whatever the type of play may be, it just keeps pace with the type of somatic growth." "With the infant, the head or arm muscles being strongest, control the somatic type of play, together with the developing sense organs of the nervous system and the brain. Sensations, coming through the sheen of light, the shake of the rattle, the throwing of the ball, are his mental toys and his delight. Later, when stronger muscles cooperate in stronger and more complex movements and when further brain development makes perception and apperception possible, activity of the whole body is the somatic type, while mentally imagination, volition and imitation, become his toys."<sup>2</sup>

This theory has much to offer, but when the bearing of such influences as environment, interests, attitudes, and habit upon play is considered, its

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<sup>1</sup>Groos, Karl, The Play of Man, Appleton Company, New York, 1901

<sup>2</sup>Appleton, M., A Comparative Study of the Play Activities of Adult Savages and Civilized Children., p. 78 and 79



weakness is appreciated.

An adequate theory of play is based upon the development and satisfying activity of the integrated person. There is no instinct of play, but play is the expression of many original tendencies modified and directed by training and experience until it is difficult to find any instinctive basis for some forms of modern adult play.

#### IV. THE SCOPE OF PLAY

##### A. Universality

Play is universal. People of every country, of every civilization, old as well as young people, have played and do play. Everywhere little girls are found cuddling and playing with some type of dolls and boys are participating in various forms of competitive sport. In Siam the doll may be a baby monkey and the boys contest in climbing cocoanut trees, but the motives behind the activities are the same as in America. Specific games too are found played in almost every known community. They are sometimes varied slightly or given different names, but in truth are the same. Not only do children everywhere play but also do the older people find recreation in various forms of dances and other spontaneous activity.

Play has always existed. Excavations of ancient Egypt reveal toys such as dolls and tops with which the children of that remote civilization must have played. The paintings upon the walls of the pyramids depict pleasant pursuits such as afternoon tea with music and dancing. The play of human beings becomes more complex as their civilization advances. The play of the most savage people consists of imitation of the more serious activities of life, or of animals or birds, and rhythmic bodily movements expressive of emotions, all of which is spontaneous and without organization. The play of the children is largely aimless imitation of their elders.



With progress in savage life there comes control of environment and resulting freedom which requires expression of personality; thus both play and art approach a higher level. Among the more nearly civilized tribes contests of skill and strength are found and where these tribes have been in direct contact with civilization for some time, either old or young adopt almost every form of play thus presented to them.

As civilization progressed, play constantly expanded. Released from the pressure of self-preservation, leisure time increased; so time could be given for preparation for the hunt and war. Imitation of these activities resulted in play and was passed along from generation to generation. In the fruitful valleys of the Nile and the Euphrates, material needs were easily satisfied, and there was time for art and intellectual attainments. Even in progress there is the natural clinging to the past, so that even still, many of our games and plays hark back to religious ceremonies when gods long since in disrepute held sway. Many of the singing games of children owe their origin to what were once religious ceremonials.

From ancient Greece have come most of our present-day contests of skill and strength. They represent a high type of civilization, for their rules signify organization and the existence of a people living under social laws.

Team games date back to the Roman Empire in the form of tennis. Through the following centuries highly organized modern team games have gradually developed. Comparatively few are of very recent invention.

Environment, physical and social, plays a definite part in determining the character of the play of different groups in different localities. Climate is a determining factor in play activities. In Norway and Sweden where winter is long, the favored sports are those of the ice and snow, and competitive



games give way to indoor gymnastics. The English and American vigorous out-of-door games are typical of the temperate zone, while the cock fight as a passive pastime satisfies the youth of the hot climate.

As the country fosters plays and games of the open spaces, the city with its limited playground area tends toward those which allow many individuals to play in the available space.

The influence of social environment upon play activities is interesting to note. The three year old son of an Army officer finds most pleasure in "dress parade" while the favorite form of expression of his little neighbor, whose father is a minister, is "preaching sermons." Can one imagine the protected sophisticated daughter of a New Yorker whose leisure is spent in dancing participating in a wolf hunt with the daughters of South Dakota?

The young and old, the world over since time began, have and do find expression in play activities adapted to or arising from the environment in which they live.

## B. Types of Play

Play activities are found to include the expression of all human tendencies. Incomplete lists have been made to the extent of a thousand different plays and games engaged in by the children of a given community. These play activities can be classified according to their form or the motives behind<sup>1</sup> them. The forms are motor, sensory and intellectual. The sensory and intellectual types are those of adult life largely, such as watching movies or listening to concerts, and card games or debating. Most motor play involves sensory and intellectual activity to be sure but because of the predominance of physical activity, they are classed motor. They include all forms of locomotion and manipulation.

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<sup>1</sup>Bowen and Mitchell, The Theory of Organized Play, pp. 207-220



Since the play of the pre-school children is so largely motor, with so little of what is purely sensory or intellectual, the types are better classified according to the motives or interests which determine the character of their play. Play arises from instinctive tendencies seeking expression and since the instincts have been classed non-social and social, to classify play activities as individual or social seems appropriate.

The earliest forms of play are individual. The child up to about three years is interested only in play activities in which he himself is the center. The small child is a selfish, non-social being because the instincts which determine his activities are non-social. He has no games; his play is formless and is without conscious purpose. Companionship is enjoyed but only for what he can get rather than what he can give. Individual play includes the purely manipulative activities which stimulate sensory and motor development; the collecting of things such as stones, insects, and stamps, and the constructing activities such as building with blocks.

Thus it is seen that forms of individual play continue through life, though with the appearance of what are classed social instincts, interest becomes centered in others and their acts are imitated. Then come plays of contest and competition when the individual's powers are matched with those of others. Following competition comes the team play of adolescence when the individual has become wholly group conscious.

### C. The Elements of Play

The outstanding elements or characteristics of play which have their periods of dominance in the play life of the child are: manipulation, imitation, imagination and rivalry.

The baby's need is to become acquainted with the world about him, and to develop physically and mentally. The instinct which impels him to



activity to further his development is to manipulate. His waking hours are at first a continual round of movements which stimulate growth. With the dawn of consciousness comes curiosity and the child's play is broadened to the reaching for, grasping and manipulation of objects. He shakes, fumbles, explores with his tongue and lips, looks intently at, and listens to everything which comes within reach of any of his organs of sense. When there is nothing to serve as an object to manipulate, the baby finds playful expression in waving his arms, kicking, vocalizing and facial contortions. When fatigue had overcome a three months old boy so that no pleasure was found in any activity, just to have his clothing removed and in the glow of a warm fire, to be allowed to kick, stretch, wave and jerk to his heart's content, never failed to put him in a most happy state for bed time.

With the accomplishment of walking, use of the newly acquired power is the most fascinating and pleasurable activity. The little toddler goes from room to room chattering and laughing gaily apparently without purpose but to revel in the joy of muscular activity. The forms of manipulative play are many. Running and climbing for the sake of the pleasure they alone provide are later diversions not because the child is for the time being a horse or a monkey, nor because he is engaged in a contest, but because he wants to run and climb.

By this time some imitative acts have entered and served as new forms in which to delight in manipulation, but not until the third year does the imitative dramatic tendency take control of play activities. The doll play of the little girl is imperfect reproduction of what she has seen her mother do. Nothing which comes within the child's observation whether good or evil escapes insertion into his play. Now running becomes a part of the



imitation of a horse and crawling on the floor is a necessary part of the reproduced activities of a cow. Thus while the form of the play does not seem to have changed a great deal the elements involved in directing the play have.

During the imitative period, from two to six, phrases, verses and songs are learned by imitation, those containing some element of imitation in the words themselves having the greatest fascination. Stories of the same type, especially those adapted to imitative dramatization, are shown a distinct<sup>1</sup> preference.

Nursery schools and kindergartens have utilized the element of imitation in the play tendency of the little child to introduce him to new experiences such as rhythm and to establish such habits as courtesy, all done in the spirit of play.

"What is it to be a child?  
 It is to believe in love, to believe in loveliness,  
 To believe in belief.  
 It is to turn pumpkins into coaches, mice into horses,  
 Lowness into loftiness, and nothing into everything.

To see a world in a grain of sand,  
 And heaven in a wild flower;  
 To hold infinity in the palm of your hand,  
 And eternity in an hour."

Francis Thompson

Between four and six imagination becomes very strong. The child's increased fund of sensory facts and his lack of a sense of relations and proportions enable him to reconstruct his mental images to suit each passing fancy. The stick horse upon which he rides into combat can immediately become his sword with which to subdue the attacking monster, and just as quickly again become a mammoth airplane in which he makes his escape. His world is what he wants it to be for he knows not the limits of time and space. He can go

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<sup>1</sup>Johnson, G. E., Education by Plays and Games, pp. 66-68, Ginn and Co., 1907



wherever his mind can reach and he can be whatever form his mental images can take. As this is being written, two boys in their fifth year are playing that the dining room rug is an island upon which they have found safety from the Indians. They each have a stick which serves as a boat to cross the patches of bare floor. When requested to go on an errand to another room the reply was, "Oh, we can't cross the water.<sup>2</sup> But they managed the longer sails and when they returned, it was with the joyful shout, "We have been out to sea."

During the imaginative play period the child prefers to play with people his own age. They no longer play individually side by side but with each other. They run together, one the horse and the other the driver. Then with the appearance of the competitive instinct, rivalry or strife to excel enters, and they run to see who can run the fastest or the farthest. The element of rivalry is what gives prominence to tussling, to racing, chasing and hiding games of childhood, and to sports and games of later years.<sup>1</sup> It is the element in business and social competition of adult life which keeps old men in the "game" long after their years and position justify retirement.

Rivalry is the desire to defeat opponents by surpassing or excelling them rather than by injuring them. It has its basis in the fighting instinct and is an expression of this tendency which needs to be encouraged, for it stimulates everyone to do his best. It is the strongest impulse to enthusiastic and vigorous activity. Rivalry between individuals within a group is often followed by cooperation between these individuals in competition with members of another group; so from what at first is an anti-social tendency there comes social unity.

These four elements of play, -manipulation, imitation, imagination and rivalry, each with its period of superior influence-, persist to some degree through life, giving playful interest to activities both simple and complex.

<sup>1</sup> Bowen and Mitchel, The Theory of Organized Play, pp. 228-229



## V. THE VALUES OF PLAY

The values to be derived from play are as varied as the values to be derived from life. The physical, intellectual, social and religious natures all are indebted to play. Time given to play is not wasted, for its values can not be overestimated. The child who does not play is the <sup>1</sup>one whose time is wasted.

The physical benefits of play alone justify the place which should be given to this spontaneous activity during childhood. It is one of the greatest contributing factors in the development of perfect health. When everything else has been done to promote health, activity is necessary to stimulate and guide growth and development. Play brings greater activity than work because it is easier, more pleasurable and less fatiguing. These characteristics are due to the fact that play reactions involve chiefly the oldest and oftenest used centers and demand little or no sustained attention. The progressive nature of play in meeting the demands of nature in stimulation and development of growth, gives it particular physical value. One of the main reasons for the contribution which play makes to general health is the fact that it is pleasurable. Everyone knows the bouyant and stimulating influence which pleasurable activities have upon the nervous system and the response which health makes to happiness.

General physical reserve to meet emergencies requiring strength, speed, skill or endurance is an asset which is built up through play, because of the variable nature of play providing constant and suitable exercise of all important physical and mental activities.

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<sup>1</sup>Waddle, Charles W., An Introduction to Child Psychology, pp. 145-149



The recreational or "rest after fatigue" values of play have been mentioned in connection with the theory of Guts Muth. This value alone gives play its rightful place in the life of old and young. To teach our youth to find relaxation and diversion in wholesome physical play will save them from possible indulgences in drugs, narcotics, alcohol or worse forms of vice.

### The Intellectual Values of Play

It has been observed that there is a relation between the intelligence of animals and the length of their infancy. The lower animal forms are born in full possession of their powers without practice or training while man, the highest expression of animal intelligence, is given the longest period of infancy. The first tendency of the infant is to activity. Upon activity<sup>1</sup> depends the growth of the body and the "mind goes hand in hand with the body." (This fact is based upon a publication of the United States Bureau of Education in 1914 which reported that children retarded in physical development were retarded mentally, while strong healthy children were forward in school<sup>2</sup> work.) The infant's first playful manipulative activities, which are reflexive in nature, give rise to consciousness when he finds his movements pleasurable. With repetition of random movements he finally develops the power to direct his activities. Later he finds that from a chosen act he receives the same sensations as when previously performed, and memory is reached. Association connections are made between sense perceptions aroused through play. With memory and experiences come images and imaginative play which is creative mental activity.

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<sup>1</sup>Bowen and Mitchell, The Theory of Organized Play, p. 309

<sup>2</sup>U. S. Bureau of Education, 1914, Physical Growth and School Progress.



Through play physical acts become automatic and involuntary so that the mind is released for higher more complex activity. At first the child's attention must be given entirely to such bodily control as walking, but with practice he relieves his nervous system of such sustained attention and frees his mind for other activity.

Play affords mental relaxation. Through long continued effort brain tissues become fatigued the same as do muscular tissues. Play involves activities of the reflex and sensor-motor level which are a "change" from the strain of the processes of the higher brain level. The school boy, exhausted from study, goes to the playground and returns breathless from physical exertion, but refreshed to the mental tasks before him. The adult who knows how to play and does is the one who withstands the strain of worry and mental effort.

Play gives first-hand information of environment. The child becomes acquainted with the physical world about him through his manipulative play. By imitation he gets an insight into the responsibilities of life. Social play furnishes the opportunity to gain an insight into and understand human nature.

The contribution which play makes to the development of judgment and decision can not be overestimated. Training in competitive games includes training in quickness of thought, interpretation and action.

To the higher mental process of abstract thought play gives a wealth of experience both actual and imagined upon which these complex mental activities can be based. Play can be utilized in teaching such abstract subjects as arithmetic and with vastly better results because of the spontaneity which playful activity arouses.



### The Social Values of Play

Through play, if freedom within limits is the policy, the small child learns the little lessons in living by experiencing and interpreting rather than by the say-so of some one in authority; and by so learning them these lessons become actual controlling elements in his life. The little tot if protected against serious injury when venturing up the luring stairs, will learn what it means to fall and to practice the precautions necessary to avoid falling wherever heights are concerned, without the element of fear which might enter if the lesson were learned through disastrous experience. Children should be allowed this freedom with reference to their experiences with one another. The little ones playing in the sand-box learn fundamental lessons in mutual rights. They learn to control themselves in these relationships because they are not controlled externally. There are times to be sure when restraint of the bully is necessary, but control should at all other times be that of mutual consent rather than force or fear. Obedience in the home is necessary, but obedience based upon fear has no moral value. Self-control which can be realized only through freedom, must be the basis of obedience.

Character is based upon instincts and emotions which find expression in muscular activity. Play which provides such expression is, therefore, a strong factor in the development of character. In play is found harmless expression for the instinctive tendencies and accompanying emotions which are no longer necessary to or in harmony with the existing social order. Children and adults alike can purge themselves of these lower impulses through playful activity and so relieve their nervous systems of restraint of forces which might otherwise break out in destruction. With



the passing of the period of nascency these instincts tend to sink into obscurity if they have been afforded wholesome and constructive expression, leaving behind them attitudes and habits of conduct which make up an individual character. Thus instincts and their accompanying emotions can be controlled, directed and substituted. In this fact lies the possibility of character training. McDougall has given four levels in the development of character in which the child without sense of right or wrong, by virtue of restraint of playmates, parents, rules of the game, and so on, reaches the level where his actions are determined by his own spiritual approval.<sup>1</sup> His spiritual approval is based upon those habits, attitudes and ideals which have become a part of him not only through instruction but by doing. Play is not only expression but impression. "There is scarcely a virtue that is not born and reared to sturdy strength through suitable and timely play."<sup>2</sup>

The foundations of moral character are in the development of regularity of the physical processes of life during the early years.<sup>3</sup> If the performance of these activities at specified times are made a part of the child's play they grow into routine, associated with pleasant memories, rather than as disagreeable tasks imposed from above.

The persons whose privilege it is to play with the child during the first three years of his life, before he desires the companionship of children his own age, have every opportunity to shape his later life, by

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<sup>1</sup> McDougall, William, Social Psychology, J.W. Luce & Co., Boston, 1918

<sup>2</sup> Waddle, Charles W., An Introduction to Child Psychology, p. 147

<sup>3</sup> Kirkpatrick, E. A., Fundamentals of Child Study, p. 183



calling forth in him responses which develop into attitudes and habits, simply by presenting for his imitation copies which adhere to the highest standards of life. Thus the child at the age of three can be courteous, calm, patient and cooperative or disrespectful, irritable, faultfinding and selfish in his relationships with his companions, depending upon the attitudes of his earliest playmates. When the child begins playing with those his own age, much of that which is undesirable will be imitated for periods of time, but fortunately they are dropped and the old habits persist.

Rightly directed play keeps the child engaged in wholesome activity. Idleness and undirected play often give opportunity to the most aggressive child to dictate and make puppets of the other children. Pre-school children should always play with children their own age unless their activities with older children can be closely supervised, for the small child is naturally submissive to those larger and older than himself, and the older child is not usually concerned with the values which the smaller child is to receive, but with his own selfish interests.



## CHAPTER III

OUTLINED SUMMARY OF THE DEVELOPMENT AND PLAY  
OF THE PRE-SCHOOL CHILD

From the educator's point of view, play in the life of the child has two functions to perform: to afford constructive active expression of existing instinctive tendencies, and to stimulate the development of those capacities which are to follow. In the section on the values of play, mention was made of the contribution which play makes to the unfolding personality of the child, and to the wholesome exercise of tendencies which if guided in their expression develop into virtues rather than vices which repression might call forth. The pages of juvenile delinquency are filled with cases which, when investigated with careful analytical studies of environment and psychological development, indicate that the origin of the crimes are often in misdirected play activities which have hampered normal sequential growth. Play is not merely pleasurable pastime or simply preparation for something which is to come; it is very real, serious living at the time and of definite educational value. As an individual plays, so is he; and any contribution to his play activities is made directly to him.

The problem confronting the new-born baby is to get control of and develop his body, to become acquainted with the world about him, to find his place in his environment, to experience and interpret experiences so that he can finally take his place as a social being living in harmony with God and man. At the outset nature has endowed him with the tendency to activities which develop coordinations, so that urged by his innate



curiosity, he is able through sense experiences to acquaint himself with himself and his immediate surroundings. He searches for sensations, he tries out his vocal apparatus, he grasps, pulls, shakes, pats, and rubs everything which comes within his reach. Then he becomes interested in other persons and what they do. Soon he finds that he can do the same as they, and so he enters into his first form of social play.

Vigorous activity stimulated by these earlier tendencies strengthens his arm, leg and body muscles so that sitting up is first achieved and then standing and walking. With his new ability to move about he finds great pleasure in himself. Surprising and pleasurable things take place when he applies his powers to his surroundings or tries out his own possibilities. Discovering and repeating new vocal sounds becomes a fascinating and absorbing business for the baby around one year old. If he has had the opportunity, he has himself been the cause of many satisfying experiences such as the production of noises by striking a tin pan or ringing a bell, or making his toys disappear into a bag and appear again by dragging them out.

Companionship is a necessary part of the small child's play life, for his imitative tendency needs a model. In this way he learns new muscular coordinations, words and their associations and sometimes new emotions. His companion can help him to build up his associations between sensations; they can provide new experiences which have connection with familiar ones and so enrich his mental content and stimulate activity. It is the opinion of some writers that explanation of the retarded psychological development of the institutional child lies in the absence of this individual, personal play relationship between the baby and an adult companion.



In play, new activities are related to new dawning abilities. The pre-school child's instinctive tendencies call for diversified activity, for each existing and developing instinct is calling for expression. Thus it is noted that the small child's "Major and minor" play activities are repeated many times each day, sometimes in a rather definite cycle. It is the duty of the child's companions to so set the stage that these valuable endowments are utilized toward natural development rather than diverted into detrimental channels. When a child wants to play in a certain way it means that his growing powers are ready for that form of free expression and to go counter to that choice is to waste time and to thwart valuable interests and desires. When a child is impelled by the forces of "gross bodily activity" and awakening "gregariousness," to compel him to sit motionless upon a chair in a circle of children his own age, is useless and criminal educationally.

Educators have through extensive research arrived at norms of development for children of specified age levels, and have through careful observation and study concluded what play activities and materials best contribute to the natural expression and stimulation of this development. The fact of individual differences would necessitate special<sup>care</sup> in the application of these norms to specific cases. The following tables are given as a summary to the psychological study of the pre-school child, and the place of play in his natural growth. The plan and much of the material is taken from "The Mental Growth of the Pre-School Child" by Arnold Gesell, Chapters<sup>1</sup> thirty-one and thirty-two.

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<sup>1</sup> Gesell, Arnold, The Mental Growth of the Pre-School Child, Macmillan Co., New York, 1926



## Neo-Natal Period

### Dominant Instinctive Tendencies

Vocalization  
Food getting (hunting)

### Motor Development

#### Reflexes:

Pupils contract and dilate (first day)  
Respiratory reflexes - sneeze, yawn, cough (first day)  
Toe extension reflex (second week)  
Wink when eyelash touched (first day)  
Sucking

Muscles of hand adjusted for grasping (first day)  
Neck and shoulders partially controlled  
Eyes coordinated (sixth week)

### Sense Perception

Temperature  
Touch - nostrils, lips, palms sensitive  
Motion  
Smell - present though not sensitive  
Taste - present though not sensitive  
Hearing - second week  
Sight - Fix eyes on objects (second week)  
- Follow moving light (1 month)

### Vocalization

Cry - differentiated (first week)  
A, eh, oo (3 months)

### Emotions and Feelings

Fear - reflex to shocks to nervous system at first  
- fear of strange noises - third month  
Surprise ( at strange visible things (1 month)  
Wonder (   
Anger  
Discomfort (birth)  
Pleasure (3 days)

### Mental Development

Attends to voice and music (1 month)  
Association between position and nursing (4 weeks)  
Memory (habit) comfort in familiar surroundings and discomfort  
in strange surroundings (end first month)  
Recognition responses to mother and bottle (1-2 months)



### Social Behavior

Smile in response to smile (3 months)

Quieted by caress, voice or picking up (1 month)

### Play Activities

Random play of hands and arms

Vocal play - cooing, gurgling

Play of sensations and motion



### Four Month Level

#### Dominant Instinctive Tendencies

- Vocalization
- Food getting
- Manipulation (general bodily activity)

#### Motor Development

- Lift head and shoulders
- Hold head erect when carried
- When prone, lift head
- Turn from back to side or from side to back
- Push against floor with feet when held
- Thumb opposition
- Reaching and grasping not accurate

#### Sense Perception

- Touch - skin sensitive
- Sight - Follows moving persons - recognize persons at 10 ft.
- Hearing - acute - turn head to sounds

#### Vocalization

- Coos and gurgles
- Laughs aloud
- Several vocalizations - intentional in expressing moods and desires

#### Emotions and Feelings

- Facial reactions - smile, etc.

#### Mental Development

- Associations having to do with physical environment
- Primary memory images - recognize familiar persons
- Reflex imitation

#### Social Behavior

- Selective interest in face
- Indifferent to strangers, new surroundings or solitude
- Laughs aloud
- Delight in companions



### Play Activities

Beginning manipulative play. Plays with hands and objects.  
Kicks feet in bath - splashes with hands  
Vigorous bodily movements

### Play Materials

Articles smooth, rough, soft and hard which do not absorb moisture  
and are readily sterilized:  
Celluloid ball  
Rubber ball - rough and smooth  
Metal bell



Six Month Level

## Dominant Instinctive Tendencies

Manipulation  
Gross bodily activity  
Vocalization  
Curiosity

## Motor Development

Hold head erect. Prefers to sit up with support  
Turn over from back to stomach and back again  
Reach - grasp (thumb opposition) bangs - splashes - pats -  
picks up objects from table

## Sense Perception

Recognize and follow object at fifty feet  
Recognize voices  
Observe intently  
Perception of distance good  
React to music

## Vocalization

Babbles - crows - coos to music  
Distinguish harsh and soothing sounds  
Associate words with definite objects, events and situations  
Recognizes own name  
Spontaneous vocalization of many syllables  
May say mama, dada

## Emotions and Feelings

Laughs frequently  
Music gives pleasure

## Mental Characteristics

Association of words with definite objects and events  
Recognizes own name  
Imitates simple familiar experiences  
Attention to environment - selective - varied



### Social Behavior

- Expresses recognition of familiar persons
- Conscious of strangers
- Enjoys presence and playfulness of persons
- Responds to facial expressions

### Play Activities

- Sensuous manipulative play
- Exploratory manipulations
- Vocal play - to music maybe
- Visual play

### Materials

- Rattle - ring - paper (under supervision)
- Resounding objects to pound (avoid over stimulation)
- Simple rhythmic music
- "Com-back" toys to provide movement to watch and call for precision in reaching.
- Objects suspended above to induce reaching - paper above the feet to induce kicking.



Nine Month Level

## Dominant Instinctive Tendencies

Manipulation  
Gross bodily activity  
Vocalization  
Food getting  
Curiosity  
Fighting

## Motor Development

Sits alone  
When feet touch floor - makes stepping movements  
May creep or hitch  
Inhibits hand to mouth  
Manipulates with one hand  
Rhythmic movements to music  
Fine prehension

## Vocalization

Make simple adjustments to words  
May say bye-bye in addition to mama and dada or equivalents

## Emotions and Feelings

Reacts to music with cooing or dancing  
Anticipation

## Mental Characteristics

Conscious imitation  
Memory - recognizes persons when absent for as long as three weeks  
Imitative memory images

## Social Behavior

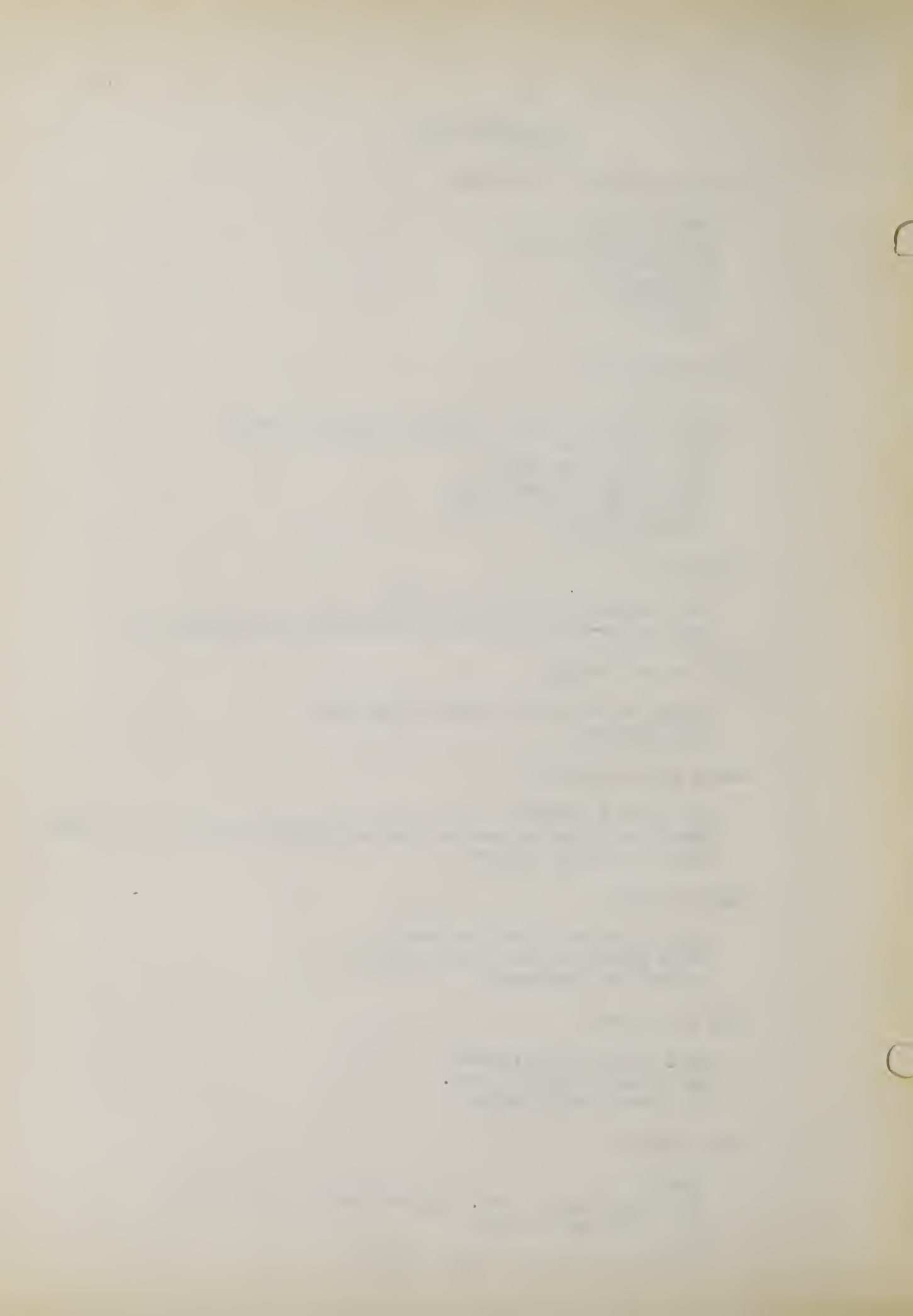
Enjoys persons as well as toys  
Plays gleefully with other persons  
Tricks like peek-a-boo

## Play Activities

Exploratory manipulation  
Imitative scribbling, etc.  
Purposeful manipulation

## Play Materials

Spools  
Bag to put spools, etc. into and pull out of  
Pans - pillows - spoons  
Music  
Gold fish to watch or canary bird



Twelve Month Level

## Dominant Instinctive Tendencies

- Gross bodily activity
- Manipulation
- Vocalization
- Food getting
- Imitation
- Self-assertion

## Motor Development

- May stand alone
- Creeps or hitches - climbs
- Walks with help
- Preference for one hand
- Scribbles imitatively
- Holds cup to drink from - may use spoon

## Language

- Responds to statements and requests of others
- Begins imitative speech
- Uses sounds and words to express desires

## Emotions and Feelings

- Anger
- Fear
- Anticipation
- Disappointment
- Surprise
- Wonder

## Mental Characteristics

- Associations established
- Memory: sense excited - span half hour to a month
- Comprehension beginnings

## Social Behavior

- Cooperates while being dressed
- Inhibits simple acts if requested
- Beginnings of independence - bowel and bladder control - puts off and on shoes
- Imitates purposefully



## Play Activities

- Self a cause
- Purposeful imitation of serious activities
- Spontaneous and imitative scribbling
- Looks at pictures - repeating again and again sound or word associated with objects pictured
- Listens to short picture stories
- Rhythmic play
- Plays with blocks - builds tower of two
- Plays with mirror image
- Repetition of simple acts as form of games

## Play Materials and Plays

- Blocks
- Picture books
- String of wooden beads to put over head and off
- Wooden toys on wheels to push and pull
- "Songs and Games of Froebel's Mother Play," Susan Blow
- for movement plays



## Eighteen Month Level

### Motor Development

- Walks alone
- Climbs stairs
- Can throw ball into box
- Scribbles spontaneously

### Language

- Vocabulary of five or more words
- Comprehends simple questions
- Points to one or two parts of body
- Says "hello," and "Thank-you"

### Mental Characteristics

- Memory - image excited over span of 4 days
- Comprehends simple questions
- Habitually inhibits certain acts
- May count two or three
- Associations arbitrary and inflexible

### Social Behavior

- Companionship desired
- Developed independence - bowel control established  
uses spoon well

### Play Activities

- Companionship desired
- Beginnings of construction - piling blocks
- Imitative play prominent
- Great bodily activity - running and throwing ball
- Dramatic mimicry
- Self-organized games
- Collecting activities
- Hiding and finding

### Materials and Plays

- Picture books - blocks
- Stories
- Access to unbreakable familiar objects in home, which supply variety  
in sensory and manipulative play
- Swaying body and swinging arms to chant "up-down"
- Imitative play - actions which are related to child's life and which  
he enjoys repeating should be done until he has control over them.  
"Wash your face," - "Wash your hands," - "Pull on your shoe," etc.



Two Year Level

## Instinctive Tendencies

Gross bodily activity .  
Manipulation  
Imitation  
Collecting and ownership  
Love of approbation  
Self-assertion

## Motor Development

Drinks with agility  
Runs up and down inclines  
Expert with kiddie kar  
Tosses ball  
Builds tower of four blocks  
Turns leaves of book

## Language

Uses simple sentences  
Vocabulary 200 words  
Names familiar objects - elementary colors - parts of body  
Two prepositions (in and under)

## Mental Characteristics

Memory - space or setting memory  
train images begin  
span two weeks  
Comprehension good - beginning number concept - "just one"  
Imitation strong  
Imagination - beginnings of reproduction and assimilation  
Tells experiences

## Social Behavior

Shows affection  
Delights in companionship  
Bladder and bowel control  
Puts on shoes - tries to fasten  
Tells own name  
Self-control

## Play Activities

Delight in colors  
Manipulative play  
Imitative play  
Rhythmic sensory play  
Stories and songs



## Play Materials and Plays

Sand - containers - spoons - shovel

Water

Blocks

Balls

Beads to string - colored

Nests of boxes - hollow cubes - medicine ball

Colored toys on wheels

Boxes of stones, shells, cones, etc.

Picture books (colored)

Finger plays

Stories and rhymes - for language play

Kiddie kar

Steps to climb

"Ride a cock Horse"

Stretching to music

Imitative play - actions of personal care continued and those which he sees other persons and animals do. Soon becomes dramatic play.



Three Year Level

## Instinctive Tendencies

Imitation  
Love of approbation  
Gregariousness

## Motor Development

Draws circle from copy  
Draws horizontal stroke imitatively  
Creases piece of paper neatly  
Aligns a card to an edge  
Uses scissors  
Opens door

## Language

Uses sentences, pronouns, past tense, and plural  
Tells simple stories  
Questions who, what, which, why  
Pronunciation much improved  
Grammar and order good depending upon copy imitated

## Mental Characteristics

Memory span three months  
    Voluntary memory  
    Performs three commissions  
Imagination - constructive  
Discrimination - tells which shorter of two lines - combines two  
    parts of severed picture  
Recognizes tunes  
Imitates complex acts  
Knows few rhymes

## Social Behavior

Desires companions own age  
Asks questions of elders  
Puts on shoes and stockings - laces shoes  
Can be trusted with breakable objects  
Puts away toys  
Goes on simple errands

## Play Activities

Desires playmates own age  
Play along side  
Constructive and imitative play



Dramatic imitative play  
 Stories  
 Puzzles (two parts)

### Play Materials

Montessori materials

Scissors - paper - paste - large size crayon - hammer - tacks - board  
 Wooden blocks - 4 inch and 8 inch cubes and these cut in half.

smooth boards 4 and 8 inches wide of various lengths

Two part puzzles

Stories and rhymes for language play

Musical instruments for rhythm and ear training

Slide - swing - sand - cart - water

Simple games - "Hide the Thimble" for observation and sight training

"Feeling" - handle objects under cover to tell what  
 they are for touch training

Smelling game - identify familiar fruits and  
 vegetables by smelling while blindfolded.

Activities to test own powers - plank to walk, Jingle Jym to  
 climb, step to jump from.

Imitative acts: fly like a bird, sail like a ship, sway like  
 lilies, to music

Dramatic play: series of imitated acts woven into a plot. As  
 the child's ideas become related his play goes on with sequence,  
 and he in a few minutes will dramatize what he sees of his  
 father's life for a day.



Four Year Level

## Instinctive Tendencies

Gregariousness  
Mastery  
Parental behavior  
Approval

## Motor Development

Hand steady  
Draws cross from copy  
Folds paper diagonally  
Jumps both feet - hops on one foot  
Walks planks; walls, etc.  
Discriminates weights

## Language

Obeys four prepositions  
Repeats twelve syllables  
Uses descriptive word with picture

## Mental Characteristics

Memory - voluntary - image  
    span may be year or longer  
    space rather than time  
    learns rhymes with few repetitions  
Comprehension - interprets humor  
    comprehends questions concerning familiar objects  
    and situations  
    performs three commissions  
Imagination - very constructive and active  
Resists suggestion

## Social Behavior

Cooperative and reliable  
Buttons clothes  
Washes self  
Brushes teeth  
Knows name - street and number  
Tender and sympathetic

## Play activities

Plays constructively



## Play Materials and Games

Scissors - pictures to cut out and paste - cut and paste chains  
Clay or plasticene  
Pictures - tell all he can see in picture - observation  
Colored and three formed beads - to sort and string  
Blackboard and chalk  
Hide the Thimble - sight game

Movement plays:

Arms - imitate birds: high in the sky, low down, with  
widespread wings or small fluttering  
wings

Legs - horse running - frog leaping - rabbit hopping

Body - trees swaying

Social play - in groups of not more than ten - to give group feeling - games with simple rules

Games of concerted action: Looby Loo - The Carpenter<sup>1</sup>

Games of imitative action: "Did You Ever See a Lassie"

Choosing Games: "Go in and out the Window"  
Playmates<sup>1</sup>

Games of contest - none

Language and song plays - stories, rhymes - songs

Dramatic play:

Repetition of desirable experiences which child himself has had or would enjoy for the sake of the mental training and emotional experience rather than the action. These can be worked out singly or in groups, sometimes in the form of singing games.

Interpretation of simple stories where action is of higher level than own to raise his ideas of what he can be. Stimulates imagination and challenges better living.

<sup>1</sup> Palmer, Luella A., Play Life in the First Eight Years, See Index of Games, Ginn and Company, 1916



## Five Year Level

### Instinctive Tendencies

- Rivalry
- Gregariousness
- Desire for approval and display

### Motor Development

- Speed and dexterity in finer coordinations
- Draws triangle and prism from copy
- Recognizable drawing of man, tree, etc.
- Skips

### Language

- Defines words by use
- Speaks with non-infantile articulation

### Mental Characteristics

- Aesthetic appreciation
- Performs three commissions
- Strong resistance to suggestion

### Social Behavior

- Puts on own hat and coat and rubbers
- Neatly replaces play material
- Affectionate and attentive to others
- Generous with toys, etc.

### Play Activities

- Advanced constructiveness
- Skips
- Begins to play with playmates each taking a part
- Places goals to strive toward in performing feats
- Urge to excell some one else beginning
- More exacting in imitations

### Play Materials and Games

- Building blocks
- Paper folding and cutting
- Tool set - three ply board or beaver board for making toys
- Tricycle
- Wagon
- "I Spy" - sight and inhibition training



## 1

"One from the Ring" - observation and memory training  
 Movement plays woven into dramatic play

Social play to give group feelings:

Games of concerted action - Lads and Lassies<sup>1</sup>

Games of Imitative Action: Little Traveler - Follow Leader

Choosing Games - Farmer in the Dell

Games of Contest - racing games

Language and Song play - verses - stories - songs

Dramatic play:

The plots should be more connected and contain more detail, more descriptive language and more action. Interests are wider so more variety can enter. Some regalia is required at this age but little, and adults should keep "hands off" in this matter for too much "properties" spoils the game.

Story Interpretation: more complex plots more remote to his own experiences calling upon his creative imagination.

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<sup>1</sup>Palmer, Luella A., Play Life in the First Eight Years, See index of Games.



## SUMMARIZING STATEMENT

The pre-school years from birth to the sixth birthday are the six years of greatest development and attainment physically, intellectually and socially which an individual experiences. The achievements of this period are fundamental to all later growth and development. Repression, or the denial of nurturing elements at this time, means a dwarfed and weakened later life. The pre-school years are the years during which attitudes and habits are established which permeate the whole of an individual's experience. It is the time when reactions both physical and mental become automatic through constant repetition.

These reactions, attitudes, and habits have their basis in the original endowments of the child. These tendencies seek expression, and that which is at hand, determines the direction in which they find satisfying expression. If there is no means of giving these instinctive urges exercise, they tend to either disappear or to be misdirected.

Through play these tendencies find active constructive expression. All the child needs are suitable play materials, playmates of the age which his social needs call for, a sympathetic guardian of his play, and he will do the rest. When his development calls for a change in form of play, if the materials are available, he will find the expression which is necessary. The presence of materials suggesting higher types of play serve as a stimulus to activities which necessitate higher powers, and so growth is called forth. No child should be forced to play, for as soon as outside compulsion or even well intended over-supervision enters, spontaneity is lost and the child is driven away from the well meaning parent or teacher. It is the birthright



of every child to be afforded full realization of his powers, and since it is through spontaneous activity that these powers are called into being and adequately express themselves, play becomes the medium for such realization and every child's birthright.



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